

IODURE DE POTASSIUM



RUBRIQUE 1: IDENTIFICATION DE LA SUBSTANCE/DU MÉLANGE ET DE LA SOCIÉTÉ/L'ENTREPRISE

1.1 Identificateur de produit:

Iodure de potassium

CAS: 7681-11-0 EC: 231-659-4 Index: Pas pertinent

REACH: 01-2119966161-40-XXXX

Autres moyens d'identification:

Pas pertinent

1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées:

Utilisations identifiées pertinentes (Utilisateur professionnel): Matière première pour l'industrie chimique et pharmaceutique. Utilisations identifiées pertinentes (Utilisateur industriel): Matière première pour l'industrie chimique et pharmaceutique. Uniquement pour usage Utilisateur professionnel/Utilisateur industriel.

Utilisations déconseillées: Toute utilisation non spécifiée dans cette section ou dans la sous-rubrique 7.3

1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité:



Mon-Droguiste.Com

39 Bis Rue Du Moulin Rouge 10150 Charmont Sous Barbuise <u>Tél</u>: +33.(0)3.25.41.04.05 <u>Email</u>: contact@mon-droguiste.com <u>Web</u>: www.mon-droguiste.com

1.4 Numéro d'appel d'urgence: +01 45 42 59 59 (ORFILA)

RUBRIQUE 2: IDENTIFICATION DES DANGERS

2.1 Classification de la substance ou du mélange:

Règlement n° 1272/2008 (CLP) :

La classification de ce produit a été réalisée conformément au Règlement n° 1272/2008 (CLP).

Eye Irrit. 2: Irritation oculaire, catégorie 2, H319

Repr. 1B: Toxique pour la reproduction, Catégorie 1B, H360

STOT RE 2: Toxicité spécifique pour certains organes cibles — Exposition répétée, catégorie de danger 2 (Oral), H373

2.2 Éléments d'étiquetage:

Règlement n° 1272/2008 (CLP) :

Danger





Indications de danger:

Eye Irrit. 2: H319 - Provoque une sévère irritation des yeux. Repr. 1B: H360 - Peut nuire à la fertilité ou au fœtus.

STOT RE 2: H373 - Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée (Oral).

Conseils de prudence:

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RUBRIQUE 2: IDENTIFICATION DES DANGERS (suite)

P201: Se procurer les instructions spéciales avant utilisation.

P260: Ne pas respirer poussières

P264: Se laver soigneusement après manipulation.

P280: Porter des gants de protection/un équipement de protection du visage/des vêtements de protection/protection respiratoire/chaussures de protection.

P305+P351+P338: EN CAS DE CONTACT AVEC LES YEUX: Rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.

P308+P313: EN CAS d'exposition prouvée ou suspectée: consulter un médecin.

P314: Consulter un médecin en cas de malaise.

P501: Éliminer le contenu/récipient conformément à la réglementation sur les déchets dangereux ou les emballages et déchets d'emballages.

Étiquetages supplémentaires:

Réservé aux utilisateurs professionnels

2.3 Autres dangers:

Le produit ne répond pas aux critères des substances persistantes, bioaccumulables et toxiques (PBT) / des substances très persistantes et très bioaccumulables (vPvB)

Le produit ne répond pas aux critères relatifs aux propriétés de perturbation endocrinienne.

RUBRIQUE 3: COMPOSITION/INFORMATIONS SUR LES COMPOSANTS

3.1 Substances:

Description chimique: Substance chimique

Conformément à l'Annexe II du Règlement (CE) nº1907/2006 (point 3), le produit contient:

	Identification		Nom chimique /classification				
CAS:		Iodure de potassium	Auto classifiée				
EC: Index REACH	231-659-4 : Pas pertinent H: 01-2119966161-40- XXXX	Règlement 1272/2008	Eye Irrit. 2: H319; Repr. 1B: H360; STOT RE 2: H373 - Danger	100 %			

Pour plus d'informations sur les dangers du produit, voir les rubriques 11, 12 et 16.

3.2 Mélanges:

Pas pertinent

RUBRIOUE 4: PREMIERS SECOURS

4.1 Description des premiers secours:

Les symptômes résultant d´une intoxication peuvent survenir après l´exposition, raison pour laquelle, en cas de doute, toute exposition directe au produit chimique ou persistance de la gêne exige des soins médicaux, en fournissant la FDS du produit concerné.

Par inhalation:

Il s'agit d'un produit ne contenant pas de substances jugées dangereuses par inhalation, toutefois, en cas de symptômes d'intoxication, retirer la personne affectée de la zone d'exposition et lui fournir de l'air frais. Demander des soins médicaux si les symptômes s'aggravent ou persistent.

Par contact cutané:

En cas de contact, il est recommandé de rincer la zone affectée à l'eau claire et de nettoyer avec du savon neutre. En cas de manifestations cutanées (démangeaison, rougeur, éruptions cutanées, ampoules,...), consultez un médecin muni de la Fiche de Données de Sécurité.

Par contact avec les yeux:

Rincer les yeux avec de l'eau en abondance à température ambiante au minimum pendant 15 minutes. Éviter que la personne affectée se frotte ou ferme les yeux. Si la personne accidentée utilise des lentilles de contact, celles-ci devront être enlevées à condition qu'elles ne soient pas collées aux yeux, auquel cas, cela pourrait provoquer des lésions supplémentaires. Dans tous les cas et après nettoyage, il faudra se rendre chez un médecin le plus rapidement possible muni de la FDS du produit.

Par ingestion/aspiration:

En cas d'ingestion, demander des soins médicaux immédiatement en fournissant la FDS du produit concerné.



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RUBRIQUE 4: PREMIERS SECOURS (suite)

4.2 Principaux symptômes et effets, aigus et différés:

Les effets aigus et à retardement sont ceux signalés dans les rubriques 2 et 11.

4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires:

Pas pertinent

RUBRIQUE 5: MESURES DE LUTTE CONTRE L'INCENDIE

5.1 Moyens d'extinction:

Moyens d'extinction appropriés:

Produit non inflammable dans des conditions normales de stockage, de manipulation et d'utilisation. En cas d'inflammation provoquée par manipulation, stockage ou usage non conforme, utiliser de préférence des extincteurs à poudre polyvalente (poudre ABC), conformément au règlement sur les installations de protection incendie.

Movens d'extinction inappropriés:

Pas pertinent

5.2 Dangers particuliers résultant de la substance ou du mélange:

La réaction suite à la combustion ou décomposition thermique peut s'avérer très toxique et par conséquent, représenter un risque très élevé pour la santé.

5.3 Conseils aux pompiers:

En fonction de l'ampleur de l'incendie, il pourra être nécessaire de porter des vêtements de protection intégrale ainsi qu'un équipement respiratoire personnel. Disposer d'un minimum d'installations d'urgence ou d'éléments d'intervention (couvertures ignifuqes, trousse à pharmacie...) selon la Directive 89/654/CE.

Dispositions supplémentaires:

Intervenir conformément au Plan d'Urgences Intérieur et aux Fiches d'information relatives aux interventions en cas d'accidents et autres urgences. Supprimer toute source d'ignition. En cas d'incendie, refroidir les containers de stockage des produits susceptibles de s'enflammer ou d'exploser en raison des températures élevées. Éviter le déversement des produits servant à éteindre l'incendie en milieu aquatique.

RUBRIQUE 6: MESURES À PRENDRE EN CAS DE DISPERSION ACCIDENTELLE

6.1 Précautions individuelles, équipement de protection et procédures d'urgence:

Pour les non-secouristes:

Balayer, récupérer à la pelle ou par d'autres moyens et conserver le produit dans des récipients adaptés et hermétiques pour une éventuelle réutilisation ou élimination.

Pour les secouristes:

Porter un équipement de sécurité. Eloigner les personnes non protégées. Voir rubrique 8.

6.2 Précautions pour la protection de l'environnement:

Produit jugé non dangereux pour l'environnement. Éviter la contamination des égouts, des eaux de surface et des eaux souterraines.

6.3 Méthodes et matériel de confinement et de nettoyage:

Nous préconisons:

Balayer, récupérer à la pelle ou par d'autres moyens et conserver le produit dans des récipients adaptés et hermétiques pour une éventuelle réutilisation ou élimination.

6.4 Référence à d'autres rubriques:

Voir les rubriques 8 et 13.

RUBRIQUE 7: MANIPULATION ET STOCKAGE

7.1 Précautions à prendre pour une manipulation sans danger:

A.- Précautions pour une manipulation en toute sécurité

Respecter la législation en vigueur en matière de prévention des risques au travail concernant la manipulation des chargements à la main. Ordonner et ranger et procéder à l'élimination moyennant des méthodes sûres (chapitre 6).



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RUBRIQUE 7: MANIPULATION ET STOCKAGE (suite)

B.- Recommandations techniques pour la prévention des incendies et des explosions.

Compte tenu de ses caractéristiques d'inflammabilité, le produit ne présente pas de risque d'incendie, dans les conditions normales de stockage, manipulation et utilisation.

C.- Recommandations techniques pour la prévention des risques ergonomiques et toxicologiques.

LES FEMMES ENCEINTES NE DOIVENT PAS ÊTRE EXPOSÉES À CE PRODUIT. Transvaser dans un lieu réunissant les conditions de sécurité requises (douches d'urgence et rince-oeil à proximité), en utilisant des équipements de protection individuelle, notamment pour le visage et les mains (Voir rubrique 8). Restreindre les transvasements manuels aux récipients pour de petites quantités. Ne pas manger, boire et fumer dans les zones de travail se laver les mains après chaque utilisation

enlever les vêtements et l'équipement de protection contaminés avant d'entrer dans une zone de restauration

D.- Recommandations techniques pour la prévention des risques environnementaux

Il est recommandé de disposer de matériel absorbant à proximité du produit (Voir sous-rubrique 6.3)

7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités:

A.- Exigences spécifiques en matière de stockage

Stocker dans un endroit frais, sec et bien aéré

B.- Conditions générales de stockage

Éviter toutes sources de chaleur, radiation, électricité statique et tout contact avec des aliments. Pour obtenir des informations supplémentaires voir sous-rubrique 10.5

7.3 Utilisation(s) finale(s) particulière(s):

A l'exception des indications déjà spécifiées, il n'est pas nécessaire de suivre des recommandations spéciales concernant l'usage de ce produit.

RUBRIQUE 8: CONTRÔLES DE L'EXPOSITION/PROTECTION INDIVIDUELLE

8.1 Paramètres de contrôle:

Substances dont les valeurs limites d'exposition professionnelle doivent être contrôlées sur le lieu de travail:

Il n'existe pas de valeurs limites d'exposition pour les substances qui constituent le produit

DNEL (Travailleurs):

		Courte e	xposition	Longue e	exposition
Identification		Systémique	Local	Systémique	Local
Iodure de potassium	Oral	Pas pertinent	Pas pertinent	Pas pertinent	Pas pertinent
CAS: 7681-11-0	Cutanée	Pas pertinent	Pas pertinent	0,14 mg/kg	Pas pertinent
EC: 231-659-4	Inhalation	Pas pertinent	Pas pertinent	0,07 mg/m ³	Pas pertinent

DNEL (Population):

		Courte e	xposition	Longue e	exposition
Identification		Systémique	Local	Systémique	Local
Iodure de potassium	Oral	0,01 mg/kg	Pas pertinent	0,01 mg/kg	Pas pertinent
CAS: 7681-11-0	Cutanée	Pas pertinent	Pas pertinent	0,05 mg/kg	Pas pertinent
EC: 231-659-4	Inhalation	Pas pertinent	Pas pertinent	0,035 mg/m ³	Pas pertinent

PNEC:

Identification				
Iodure de potassium	STP	21,94 mg/L	Eau douce	0,597 mg/L
CAS: 7681-11-0	Sol	0,237 mg/kg	Eau de mer	0,0597 mg/L
EC: 231-659-4	Intermittent	1 mg/L	Sédiments (Eau douce)	2,94 mg/kg
	Oral	Pas pertinent	Sédiments (Eau de mer)	0,294 mg/kg

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8.2 Contrôles de l'exposition:

A.- Mesures de protection individuelle, telles que les équipements de protection individuelle



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RUBRIQUE 8: CONTRÔLES DE L'EXPOSITION/PROTECTION INDIVIDUELLE (suite)

À titre de mesure préventive, il est recommandé d'utiliser les équipements de protection individuelle basiques, avec le <marquage CE> correspondant. Pour plus de renseignements sur les équipements de protection individuelle (stockage, utilisation, nettoyage, entretien, type de protection,...) consulter la brochure d'informations fournie par le fabricant de l'EPI. Les indications formulées dans ce point concernent le produit pur. Les mesures de protection concernant le produit dilué pourront varier en fonction de son degré de dilution, de son utilisation, de la méthode d'application, etc. Pour déterminer l'obligation d'installer des douches de sécurité et/ou des rince-œil de secours dans les entrepôts, respecter la règlementation concernant le stockage de produits chimiques applicable dans chaque cas. Pour plus de renseignements, se référer aux sousrubriques 7.1 et 7.2. Toute l'information contenue ici est une recommandation qui nécessite une spécification de la part des services de prévention des risques au travail, si la société dispose de mesures supplémentaires.

B.- Protection respiratoire.

Pictogramme	PPE	Marquage	normes ECN	Observations
Protection des voies respiratoires obligatoire	Masque auto filtrant contre les gaz, vapeurs et particules (Type de filtre: P3/FFP3)		EN 149:2001+A1:2010 EN 405:2002+A1:2010 EN ISO 136:1998	À remplacer dès lors que la résistance à respirer augmente et/ou dès lors qu´une odeur ou un goût du produit contaminant est détecté.

C.- Protection spécifique pour les mains.

Pictogramme	PPE	Marquage	normes ECN	Observations
Protection des mains obligatoire	Gants de protection chimique, non jetable	CAT III	EN ISO 374-1:2016+A1:2018 EN 16523-1:2015+A1:2018 EN ISO 21420:2020	Le temps d'imprégnation (Breakthrough Time) indiqué par le fabricant doit être supérieur au temps d'utilisation du produit. Ne pas utiliser des crèmes protectrices après tout contact du produit avec la peau.

D.- Protection du visage et des yeux

Pictogramme	PPE	Marquage	normes ECN	Observations
Protection du visage obligatoire	Écran facial	CATII	EN 166:2002 UNE-EN ISO 18526-1 al 4:2020 UNE-EN ISO 18526-1 al 4:2020 EN ISO 4007:2018	Nettoyer quotidiennement et désinfecter régulièrement en suivant les instructions du fabricant. À utiliser s´il y a un risque d'éclaboussements.

E.- Protection du corps

Pictogramme	PPE	Marquage	normes ECN	Observations
Protection du corps obligatoire	Vêtement de protection en cas de risques chimiques	CAT III	EN 13034:2005+A1:2009 UNE-EN ISO 18526-1 al 4:2020 EN ISO 13982- 1:2005/A1:2011 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1995	Usage exclusif au travail.
Protection des pieds obligatoire	Chaussures de sécurité contre risque chimique	CAT III	EN ISO 20345:2022 EN 13832-1:2019	Remplacer les bottes en présence de n'importe quel indice d'usure.

F.- Mesures complémentaires d'urgence

Il est recommandé de mettre en place des équipements d'urgence supplémentaires dans les lieux de travail particulièrement exposés au produit ou dans les situations où l'évaluation des risques met en évidence la nécessité d'un tel équipement.

Mesure d'urgence	normes	Mesure d'urgence	normes
+	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	- (0)	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
Douche d'urgence		Rincer œil	

Contrôles d'exposition liés à la protection de l'environnement:

En vertu de la législation communautaire sur la protection environnementale, il est recommandé d'éviter tout déversement du produit mais aussi de son emballage dans l'environnement. Pour obtenir des informations supplémentaires voir sous-rubrique 7.1.D



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RUBRIQUE 8: CONTRÔLES DE L'EXPOSITION/PROTECTION INDIVIDUELLE (suite)

Composés organiques volatiles:

Conformément à l'application de la Directive 2010/75/EU, ce produit offre les caractéristiques suivantes:

C.O.V. (2010/75/UE): 0 % poids

Concentration de C.O.V. à 20 °C: 0 kg/m³ (0 g/L)

Nombre moyen de carbone: Pas pertinent

Poids moléculaire moyen: Pas pertinent

DLID	DIOLIE O, DDODDIÉTÉS DUVSIOLIES ET CUIMIO	LIEC
KUB	RIQUE 9: PROPRIÉTÉS PHYSIQUES ET CHIMIQ	
9.1	Informations sur les propriétés physiques et ch	-
	Pour plus d'informations voir la fiche technique du pro	duit.
	Aspect physique:	
	État physique à 20 °C:	Solide
	Aspect:	Pulvérulent
	Couleur:	Blanc
	Odeur:	Pas pertinent *
	Seuil olfactif:	Pas pertinent *
	Volatilité:	
	Température d'ébullition à pression atmosphérique:	1323 ℃
	Pression de vapeur à 20 °C:	Pas pertinent *
	Pression de vapeur à 50 °C:	Pas pertinent *
	Taux d'évaporation à 20 °C:	Pas pertinent *
	Caractéristiques du produit:	
	Masse volumique à 20 °C:	Pas pertinent *
	Densité relative à 20 °C:	3,12
	Viscosité dynamique à 20 °C:	Pas pertinent *
	Viscosité cinématique à 20 °C:	Pas pertinent *
	Viscosité cinématique à 40 °C:	Pas pertinent *
	Concentration:	Pas pertinent *
	pH:	8
	Densité de vapeur à 20 °C:	Pas pertinent *
	Coefficient de partage n-octanol/eau à 20 °C:	0,04
	Solubilité dans l'eau à 20 °C:	1440 kg/m³
	Propriété de solubilité:	Pas pertinent *
	Température de décomposition:	Pas pertinent *
	Point de fusion/point de congélation:	686 °C
	Inflammabilité:	
	Point d'éclair:	Pas pertinent *
	Inflammabilité (solide, gaz):	Pas pertinent *
	Température d'auto-ignition:	Pas pertinent *
	Limite d'inflammabilité inférieure:	Pas pertinent *
	Limite d'inflammabilité supérieure:	Pas pertinent *
	Explosivité (Solide):	
	Limite inférieure d'explosivité:	Pas pertinent *
	*Pas pertinent en raison de la nature du produit / non déterminan	it pour les propriétés de danger du produit

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RUBRIQUE 9: PROPRIÉTÉS PHYSIQUES ET CHIMIQUES (suite)

Limite supérieure d'explosivité: Pas pertinent *

Caractéristiques des particules:

Diamètre équivalent médian: Pas pertinent *

9.2 Autres informations:

Informations concernant les classes de danger physique:

Propriétés explosives:

Propriétés comburantes:

Substances ou mélanges corrosifs pour les métaux:

Chaleur de combustion:

Aérosols-pourcentage total suivant (en masse) de composants inflammables:

Pas pertinent *

Pas pertinent *

Pas pertinent *

Autres caractéristiques de sécurité:

Tension superficielle à 20 °C:

Indice de réfraction:

Pas pertinent *

Pas pertinent *

RUBRIQUE 10: STABILITÉ ET RÉACTIVITÉ

10.1 Réactivité:

Aucune réaction dangereuse attendue dans les conditions normales de stockage, manipulation et utilisation. Voir la rubrique 7 de la Fiche de Données de Sécurité.

10.2 Stabilité chimique:

Chimiquement stable dans les conditions indiquées de stockage, manipulation et utilisation.

10.3 Possibilité de réactions dangereuses:

En conditions normales, pas de réactions dangereuses susceptibles de produire une pression ou des températures excessives.

10.4 Conditions à éviter:

Applicables pour manipulation et stockage à température ambiante :

Choc et friction	Contact avec l'air	Échauffement	Lumière Solaire	Humidité
Non applicable	Non applicable	Non applicable	Non applicable	Non applicable

10.5 Matières incompatibles:

Acides	Eau	Matières comburantes	Matières combustibles	Autres
Eviter les acides forts	Non applicable	Non applicable	Non applicable	Éviter les alcalins ou les bases fortes

10.6 Produits de décomposition dangereux:

Voir sous-rubriques 10.3, 10.4 et 10.5 pour connaître précisément les produits de décomposition. En fonction des conditions de décomposition et à l'issue de cette dernière, certains mélanges complexes à base de substances chimiques peuvent se dégager: dioxyde de carbone (CO₂), monoxyde de carbone et autres composés organiques.

RUBRIQUE 11: INFORMATIONS TOXICOLOGIQUES

11.1 Informations sur les classes de danger telles que définies dans le règlement (CE) no 1272/2008:

Effets dangereux pour la santé:

En cas d'exposition répétée, prolongée ou de concentrations supérieures à celles qui sont établies par les limites d'exposition professionnelles, des effets néfastes pour la santé peuvent survenir selon le mode d'exposition :

- A- Ingestion (effets aigus):
 - Toxicité aiguë: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses par ingestion. Pour plus d'information, voir rubrique 3.
 - Corrosivité/irritabilité: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses dans ce cadre. Pour plus de renseignements, se référer à la rubrique 3.

^{*}Pas pertinent en raison de la nature du produit / non déterminant pour les propriétés de danger du produit



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RUBRIQUE 11: INFORMATIONS TOXICOLOGIQUES (suite)

B- Inhalation (effets aigus):

- Toxicité aiguë: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses par inhalation. Pour plus d'information, voir rubrique 3.
- Corrosivité/irritabilité: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses dans ce cadre. Pour plus de renseignements, se référer à la rubrique 3.
- C- Contact avec la peau et les yeux (effets aigus):
 - Contact avec la peau: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, et ne contiennent pas de substances jugées dangereuses au vu des effets décrits. Pour plus d'information, voir rubrique 3.
 - Contact avec les yeux: Produit des lésions oculaires après un contact
- D- Effets CMR (carcinogénicité, mutagénicité et toxicité pour la reproduction):
 - Carcinogénicité: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses au vu des effets décrits. Pour plus d'information, voir rubrique 3. IARC: Pas pertinent
 - Mutagénicité: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses dans ce cadre. Pour plus de renseignements, se référer à la rubrique 3.
 - Toxicité sur la reproduction: Peut nuire à la fertilité ou au fœtus
- E- Effets de sensibilisation:
 - Respiratoire: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses à effets sensibilisants. Pour plus d'information, voir rubrique 3.
 - Cutané: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses dans ce cadre. Pour plus de renseignements, se référer à la rubrique 3.
- F- Toxicité pour certains organes cibles (STOT)-temps d'exposition:

Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses dans ce cadre. Pour plus de renseignements, se référer à la rubrique 3.

- G- Toxicité pour certains organes cibles (STOT)-exposition répétée:
 - Toxicité pour certains organes cibles (STOT)-exposition répétée: Effets nocifs pour la santé en cas d'ingestion de façon répétée, entraînant une dépression du système nerveux central et provoquant des maux de tête, étourdissements, vertiges, nausées, vomissements, confusion, et en cas d'affection grave, une perte de connaissance.
 - Peau: Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses dans ce cadre. Pour plus de renseignements, se référer à la rubrique 3.
- H- Danger par aspiration:

Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses dans ce cadre. Pour plus de renseignements, se référer à la rubrique 3.

Autres informations:

Pas pertinent

Information toxicologique spécifique produit:

Toxicité sévère		Genre
DL50 orale 3118 mg/kg		Rat

Information toxicologique spécifique des substances:

Identification	Toxicité sévère		Genre
Iodure de potassium	DL50 orale	3118 mg/kg	Rat
	DL50 cutanée	>2000 mg/kg	
EC: 231-659-4	CL50 inhalation de poussières	>5 ma/L	

11.2 Informations sur les autres dangers:

Propriétés perturbant le système endocrinien

Le produit ne répond pas aux critères relatifs aux propriétés de perturbation endocrinienne.

Autres informations

Pas pertinent

RUBRIQUE 12: INFORMATION ÉCOLOGIQUE



IODURE DE POTASSIUM



RUBRIQUE 12: INFORMATION ÉCOLOGIQUE (suite)

Compte tenu des données disponibles, les critères de classification ne sont pas remplis, car le produit ne contient pas de substances jugées dangereuses dans ce cadre. Pour plus de renseignements, se référer à la rubrique 3.

12.1 Toxicité:

Toxicité aquatique spécifique produit:

Toxicité sévère		Espèce	Genre
CL50	3780 mg/L (96 h)	Pas pertinent	Poisson

Toxicité aquatique spécifique des substances:

Toxicité chronique:

Identification	Concentration		Espèce	Genre
Iodure de potassium	NOEC	66,356 mg/L	N/A	Poisson
CAS: 7681-11-0 EC: 231-659-4	NOEC	29,87 mg/L	Daphnia magna	Crustacé

12.2 Persistance et dégradabilité:

Pas pertinent

12.3 Potentiel de bioaccumulation:

Pas pertinent

12.4 Mobilité dans le sol:

Pas pertinent

12.5 Résultats des évaluations PBT et VPVB:

Le produit ne répond pas aux critères des substances persistantes, bioaccumulables et toxiques (PBT) / des substances très persistantes et très bioaccumulables (vPvB)

12.6 Propriétés perturbant le système endocrinien:

Le produit ne répond pas aux critères relatifs aux propriétés de perturbation endocrinienne.

12.7 Autres effets néfastes:

Non décrits

RUBRIQUE 13: CONSIDÉRATIONS RELATIVES À L'ÉLIMINATION

13.1 Méthodes de traitement des déchets:

Code Description		Type de déchet (Règlement (UE) n °1357/2014)	
	Il n´est pas possible d´attribuer un code spécifique, étant donné que cela dépend de l´usage prévu par le destinataire	Dangereux	

Type de déchets (Règlement (UE) n °1357/2014):

HP5 Toxicité spécifique pour un organe cible (STOT)/toxicité par aspiration, HP10 Toxique pour la reproduction, HP4 Irritant — irritation cutanée et lésions oculaires

Gestion du déchet (élimination et évaluation):

Consulter le responsable des déchets compétent en matière d'évaluation et élimination conformément à l'Annexe 1 et l'Annexe 2 (Directive 2008/98/CE, Décret no 2011-828, Ordonnance no 2010-1579). Conformément aux codes 15 01 (2014/955/CE), au cas où l'emballage entrerait en contact avec le produit, il faudra procéder de la même façon qu'avec le propre produit, dans le cas contraire, il faudra le traiter comme un résidu non dangereux. Il est fortement déconseillé de le verser dans des cours d'eau. Voir sous-rubrique 6.2.

Dispositions se rapportant au traitement des déchets:

Conformément à l'Annexe II du Règlement (CE) nº1907/2006 (REACH) les dispositions communautaires ou nationales se rapportant au traitement des déchets sont appliquées.

Législation communautaire: Directive 2008/98/CE, 2014/955/CE, Règlement (UE) n °1357/2014

RUBRIQUE 14: INFORMATIONS RELATIVES AU TRANSPORT

Ce produit n'est pas réglementé pour le transport (ADR/RID, IMDG, IATA)



IODURE DE POTASSIUM



RUBRIQUE 15: INFORMATIONS RELATIVES À LA RÉGLEMENTATION

15.1 Réglementations/législations particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement:

- Article 95, RÈGLEMENT (UE) No 528/2012: Pas pertinent
- Règlement (UE) 2019/1021 sur les polluants organiques persistants: Pas pertinent
- Règlement (UE) 2024/590 sur les substances qui perforent la couche d'ozone : Pas pertinent
- REGLEMENT (UE) No 649/2012 régissant l'exportation et l'importation de produits chimiques dangereux: Pas pertinent
- Substances candidates à l'autorisation dans le Règlement (CE) 1907/2006 (REACH): Pas pertinent
- Substances inscrites à l'annexe XIV de REACH (liste d'autorisation) et date d'expiration: Pas pertinent

Seveso III:

Pas pertinent

Restrictions en matière de commercialisation et d'usage de certaines substances et mélanges dangereux (Annexe XVII REACH, etc...):

Produit jugé dangereux CMR. Sa commercialisation est interdite au public en général. Par son appartenance à la catégorie CMR, il est obligatoire d'appliquer les mesures spécifiques de prévention contre les risques au travail recueillis

Dispositions spéciales en matière de protection des personnes ou d'environnement:

Il est recommandé d'utiliser l'information recueillie sur cette fiche de données de sécurité faisant office d'information de départ pour une évaluation des risques des circonstances locales dans le but d'établir les mesures nécessaires en matière de prévention des risques pour la manipulation, l'utilisation, le stockage et l'élimination du produit.

Autres législations:

Pas pertinent

15.2 Évaluation de la sécurité chimique:

Le fournisseur a effectué l'évaluation de la sécurité chimique.

RUBRIQUE 16: AUTRES INFORMATIONS

Législation s'appliquant aux fiches de données en matière de sécurité:

Cette fiche de données en matière de sécurité a été réalisée conformément à l'ANNEXE II - Guide pour élaborer des Fiches de Données en matière de Sécurité du Règlement (CE) Nº 1907/2006 (RÈGLEMENT (UE) 2020/878 DE LA COMMISSION)

Modifications par rapport à la fiche de sécurité précédente avec répercussions sur les mesures de gestion du risque :

Pas pertinent

Textes des phrases législatives dans la rubrique 2:

H319: Provoque une sévère irritation des yeux.

H360: Peut nuire à la fertilité ou au fœtus.

H373: Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée (Oral).

Textes des phrases législatives dans la rubrique 3:

Les phrases inscrites ne portent pas sur le produit lui-même, elles sont seulement à titre d'information et se réfèrent aux composants individuels qui apparaissent dans la section 3

Règlement n° 1272/2008 (CLP):

Eye Irrit. 2: H319 - Provoque une sévère irritation des yeux.

Repr. 1B: H360 - Peut nuire à la fertilité ou au fœtus.

STOT RE 2: H373 - Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée (Oral).

- SUITE À LA PAGE SUIVANTE -

Conseils relatifs à la formation:

Une formation minimum en matière de prévention des risques au travail est recommandée pour le personnel qui va manipuler ce produit, dans le but de faciliter la compréhension et l'interprétation de cette fiche de données de sécurité au même titre que l'étiquetage du produit.

Sources de documentation principale:

http://echa.europa.eu

http://eur-lex.europa.eu

Abréviations et acronymes:



IODURE DE POTASSIUM



RUBRIQUE 16: AUTRES INFORMATIONS (suite)

ADR: Accord européen relatif au transport international des marchandises dangereuses par route

IMDG: Code maritime international des marchandises dangereuses

IATA: Association internationale du transport aérien ICAO: Organisation de l'aviation civile internationale

DCO: Demande chimique en oxygène

DBO5: Demande biologique en oxygène après 5 jours

FBC: Facteur de bioconcentration

DL50: Dose létale 50 CL50: Concentration létale 50

CE50: Concentration effective 50

Log Pow: Coefficient de partage octanol/eau UFI: identifiant unique de formulation

IARC: Centre international de recherche sur le cancer

L'information contenue sur cette Fiche de données de sécurité est fondée sur des sources, des connaissances techniques ainsi que sur la législation en vigueur au niveau européen et national, ne pouvant en aucun cas, garantir l'exactitude de celle-ci. Il est impossible de considérer que ladite information est une garantie des propriétés dudit produit. Il s'agit simplement d'une description concernant les exigences en matière de sécurité. La méthodologie et les conditions de travail des utilisateurs de ce produit ne relèvent pas de nos connaissances et de nos contrôles, l'utilisateur devant toujours assumer en toute responsabilité les mesures nécessaires à prendre pour observer les exigences légales en matière de manipulation, stockage, usage et élimination de produits chimiques. L'information contenue sur cette fiche de sécurité ne concerne que ce produit, ce dernier ne devant pas être utilisé à d'autres fins que celles qui y sont stipulées.

FIN DE LA FICHE DE DONNÉES DE SÉCURITÉ -

ANNEX

EXPOSURE SCENARIOS POTASSIUM IODIDE

The current document includes relevant occupational and environmental exposure scenarios (ES) for the production and use of Potassium Iodide as required under the REACH Regulation (Regulation (EC) No 1907/2006). For the development of the ES the Regulation and the relevant REACH Guidance have been considered. For the description of the covered uses and processes, the "R.12–Use descriptor system" guidance (Version: 2, March 2010, ECHA-2010-G-05-EN), for the description and implementation of risk management measures (RMM) the "R.13–Risk management measures" guidance (Version: 1.1, May 2008), for the occupational exposure estimation the "R.14–Occupational exposure estimation" guidance (Version: 2, May 2010, ECHA-2010-G-09-EN) and for the actual environmental exposure assessment the "R.16–Environmental Exposure Assessment" (Version: 2, May 2010, ECHA-10-G-06-EN) was used.

EXPOSURE SCENARIOS		
1. MANUFACTURE OF POTASSIUM IODIDE	3	
ES 1: Manufacture and reprocessing of potassium iodide	3	
2. FORMULATION OF PREPARATIONS	16	
ES 2 : Mixing and blending of substances into (chemical) preparations in all types of formulating industries	16	
3. USE AT INDUSTRIAL SITES		
ES 3 : Mixing or blending of substances which will be physically or chemically bound into or onto a matrix (material) such as plastics additives in master batches or plastic compounds.	28	
ES 4 : Formulation [mixing] of preparations including food additives, cleaning products, offshore drilling and pharmaceutical applications		
ES 5: Reagent in manufacture or synthesis of fine chemicals and pharmaceuticals		
ES 6: Additives in cleaning, washing or disinfectant agents		
ES 7: Laboratory reagent	74	

4. USES BY PROFESSIONAL WORKERS	
ES 8: Re-packing of Potassium Iodide	
ES 9: Uses as laboratory reagent	

1. EXPOSURE SCENARIOS FOR THE MANUFACTURE OF POTASSIUM IODIDE

1. Short title of scenario 1	
Industrial manufacturing and reprocess	sing of potassium iodide
2. Description and processes cover	red in the exposure scenario
	SU 8: Manufacture of bulk, large scale chemicals (including petroleum products)
Sector of use (SU)	SU 9: Manufacture of fine chemicals
	SU 10: Formulation [mixing] of preparations and/or repackaging (excluding alloys)
Product category (PC)	PC14, PC19, PC20, PC21
Process category (PROC)	PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent
Article category (AC)	Not applicable
Environmental release category (ERC) ERC 1: Manufacture of substances	

3. Exposure scenario 1 : Industrial manufacture and reprocessing of potassium iodide

3.1 Environmental contributing scenario 1 Conditions of use Not defined Releases Not defined

Exposure risks for the environment and man via environment:

Potassium iodide is very stable under ordinary conditions of use and storage. The phototransformation in air is irrelevant to potassium iodide, because few potassium iodide can be distributed in air for the low vapour pressure and high water solubility

Hydrolysis is not a concern to such inorganic substance which can be completely ionized in water phase. Potassium iodide will completely dissociate in water giving potassium ion and iodide anion

The potassium iodide is readily absorbed by organisms as K+ and I-, which are both small (an)ions and well known not likely to be bioaccumulated

Based on the intrinsic prosperities of potassium iodide, the substance can be expected to have a low potential for adsorption (completely ionized to small ions in water phase). The potassium ion and iodide anion are uniformly distributed in water phase. In the air, these two basic (an)ions is negligible, due to high water solubility and low vapour pressure. To sediment and soil phases, these two (an)ions are mostly distributed in the pore water.

3.2 Worker contributing scenario 1: Use in closed process, no likelihood of exposure (PROC 1)

one the results of the second				
3.2.1 Conditions of use	T			
Product characteristics				
 Physical state 	Solid			
 Dustiness of material 	Low			
 Concentration of substance mixture 	Substance as such (100%	6)		
Amount used, frequency and duration of	f use/exposure			
 Duration of activity 	< 8 hours			
Technical and organizational conditions and	measures			
Other relevant operational conditions				
o General ventilation	Basic general ventilation	(1-3 air changes per hour)		
o Containment	Closed system (minimal o	Closed system (minimal contact during routine operations)		
 Local exhaust ventilation 	No [Effectiveness Inhalat	No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 	Advanced			
Conditions and measures related to personal	l protection, hygiene and health	evaluation		
 Dermal Protection 	No [Effectiveness Derma	l: 0%]		
o Respiratory Protection	No [Effectiveness Inhalat	No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure				
o Place of use	Indoors	Indoors		
o Process temperature	Ambient (as solid)	Ambient (as solid)		
o Skin surface potentially exposed	One hand face only (240	One hand face only (240 cm2)		
3.2.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	Exposure concentration	Risk characterisation		

Inhalation, systemic, long-term	0.01	mg/m ³ (TRA Worker)	RCR = 0.143
Inhalation, systemic, acute	tion, systemic, acute 0.04 mg/m³ (Qualitative
Inhalation, local, long-term	0.01 mg/m³ (TRA Worker)		Qualitative
Inhalation, local, acute	0.04	mg/m³ (TRA Worker)	Qualitative
Dermal, systemic, long-term	0.034	I mg/m³ (TRA Worker)	RCR = 0.034
Dermal, systemic, acute			Qualitative
Combined routes, systemic, long-term			RCR = 0.177
3.3 Worker contributing scenario 2 occasional controlled exposure (Pl	: Use in ROC 2)	closed process, con	tinuous process with
3.3.1 Conditions of use			
Product characteristics			
 Physical state 		Solid	
 Dustiness of material 		Low	
 Concentration of substance mixt 	ure	Substance as such (100%)	
Amount used, frequency and duration of t	use/expo	sure	
 Duration of activity 		< 8 hours	
Technical and organizational conditions a	nd meas	ures	
Other relevant operational conditions			
General ventilation		Basic general ventilation (1-3 air changes per hour)	
 Containment 		Closed system (minimal contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhala	ation: 0%]
Occupational Health and Safety Management System		Advanced	
Conditions and measures related to person	onai prote		
Dermal Protection		No [Effectiveness Dermal: 0%]	
o Respiratory Protection		No [Effectiveness Inhala	ation: 0%]
Other conditions affecting workers exposu	ıre		
o Place of use		Indoors	
 Process temperature 		Ambient (as solid)	
 Skin surface potentially exposed 		Two hands face (480 ci	m2)

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.006 mg/m ³ (TRA Worker)	RCR = 0.086
Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.006 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)	Qualitative

			T	
Dermal, systemic, long-term	0.822 mg/m³ (TRA Worker)		RCR = 0.822	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.908	
3.4 Worker contributing scenario (PROC 3)	o 3: Use ir	closed batch proces	s (synthesis or formulation)	
3.4.1 Conditions of use				
Product characteristics				
 Physical state 		Solid		
 Dustiness of material 		Low		
 Concentration of substance r 		Substance as such (100	9%)	
Amount used, frequency and duration	of use/expo	sure		
o Duration of activity		< 8 hours		
Technical and organizational condition	s and meas	sures		
Other relevant operational conditions				
o General ventilation		Basic general ventilation (1-3 air changes per hour)		
 Containment 		Closed system (minimal contact during routine operations)		
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal protection, hygiene and health evaluation				
 Dermal Protection 		No [Effectiveness Dermal: 0%]		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exp	osure			
o Place of use		Indoors		
o Process temperature		Ambient (as solid)		
 Skin surface potentially expos 	sed	One hand face only (240 cm2)		
3.4.2 Exposure concentrations and	d risks for v	workers		
Route of exposure and type of effect	ts Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.07	mg/m ³ (TRA Worker)	RCR = 1	
Inhalation, systemic, acute	0.28	mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term 0.07		mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, acute 0.28		mg/m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term 0.69		mg/m ³ (TRA Worker)	RCR = 0.69	
Dermal, systemic, acute	Dermal, systemic, acute		Qualitative	
Combined routes, systemic, long-term			RCR = 1.69	

3.5 Worker contributing scenario 4: Use in batch and other process (synthesis) where opportunity for exposure arises (PROC 4)

3.5.1 Conditions of use				
Product characteristics				
o Physical state		Solid		
Dustiness of material		Low		
 Concentration of substance mixtur 		Substance as such (100	0%)	
Amount used, frequency and duration of us	e/expo	sure		
 Duration of activity 		< 8 hours		
Technical and organizational conditions and	d meas	sures		
Other relevant operational conditions				
o General ventilation		Basic general ventilation (1-3 air changes per hour)		
 Containment 		Closed system (minima	I contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhala	ation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to person	al prot	ection, hygiene and healt	h evaluation	
 Dermal Protection 		No [Effectiveness Derm	nal: 0%]	
 Respiratory Protection 		No [Effectiveness Inhala	ation: 0%]	
Other conditions affecting workers exposure	е			
 Place of use 		Indoors		
 Process temperature 		Ambient (as solid)		
 Skin surface potentially exposed 		Two hands face (480 cr	m2)	
3.5.2 Exposure concentrations and risk	s for v	workers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.05	mg/m ³ (TRA Worker)	RCR = 0.714	
Inhalation, systemic, acute	0.2 m	ng/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.05	mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.2 m	ng/m³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.686	6 mg/m ³ (TRA Worker)	RCR = 0.686	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 1.4	
3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5)				
3.6.1 Conditions of use				
Product characteristics				
o Physical state		Solid		
o Dustiness of material	-		Low	
Concentration of substance mixture		Substance as such (100%)		
Amount used, frequency and duration of use/exposure				

o Duration of activity	< 8 h	ours	
Technical and organizational conditions and	measures		
Other relevant operational conditions			
o General ventilation	Basic	general ventilation	(1-3 air changes per hour)
 Containment 	Close	ed system (minimal	contact during routine operations)
 Local exhaust ventilation 	No [E	Effectiveness Inhala	tion: 0%]
 Occupational Health and Safety Management System 	Adva	nced	
Conditions and measures related to personal			
o Dermal Protection		Effectiveness Derma	-
o Respiratory Protection	No [E	Effectiveness Inhala	tion: 0%]
Other conditions affecting workers exposure			
o Place of use	Indoo		
o Process temperature		ient (as solid)	<u></u>
Skin surface potentially exposed	I	hands face (480 cm	12)
3.6.2 Exposure concentrations and risks			T
		concentration	Risk characterisation
Inhalation, systemic, long-term		m ³ (TRA Worker)	RCR = 0.429
Inhalation, systemic, acute	0.2 mg/m	³ (TRA Worker)	Qualitative
Inhalation, local, long-term 0.03 mg		n ³ (TRA Worker)	Qualitative
Inhalation, local, acute 0.2 mg/		³ (TRA Worker)	Qualitative
Dermal, systemic, long-term 0.823 m		/m ³ (TRA Worker)	RCR = 0.823
Dermal, systemic, acute			Qualitative
Combined routes, systemic, long-term			RCR = 1.251
3.7 Worker contributing scenario 6: To discharging) from/to vessels/large contributions			
3.7.1 Conditions of use			
Product characteristics			
o Physical state		Solid	
o Dustiness of material		Low	
Concentration of substance mixture		Substance as such (100%)	
Amount used, frequency and duration of use/exposu			
o Duration of activity		< 8 hours	
Technical and organizational conditions and measu			
Other relevant operational conditions			
o General ventilation			

		Closed system (n operations)	ninimal contact during routine	
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]		
Occupational Health and Safety Management System		Advanced		
Conditions and measures related to person protection, hygiene and health evaluation	ıal			
Dermal Protection		No [Effectiveness	Dermal: 0%]	
Respiratory Protection		No [Effectiveness		
Other conditions affecting workers exposur	e		<u>.</u>	
Place of use		Indoors		
Process temperature		Ambient (as solid)	
Skin surface potentially exposed		Two hands (960 o	cm2)	
3.7.2 Exposure concentrations and risk	s for worke	ers	·	
Route of exposure and type of effects	Exposure	concentration	Risk characterisation	
Inhalation, systemic, long-term	0.03 mg/m	³ (TRA Worker)	RCR = 0.429	
Inhalation, systemic, acute	0.2 mg/m ³	(TRA Worker)	Qualitative	
Inhalation, local, long-term	0.03 mg/m	³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.2 mg/m ³	(TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.823 mg/	m ³ (TRA Worker)	RCR = 0.823	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 1.251	
3.8 Worker contributing scenario 7:				
discharging) from/to vessels/large c	ontainers	at dedicated facil	ities (PROC 8b)	
3.8.1 Conditions of use				
Product characteristics	0.11			
Physical state	Soli	-		
 Dustiness of material Concentration of substance mixture 	Low	bw ubstance as such (100%)		
Concentration of substance mixture Amount used, frequency and duration of use	•	stance as such (100	176)	
		hours		
 Duration of activity Technical and organizational conditions and measures 		ilouis		
Other relevant operational conditions				
		sic general ventilation (1-3 air changes per hour)		
		sed system (minimal contact during routine operations)		
		Effectiveness Inhalation: 0%]		
Occupational Health and Safety		anced		
Conditions and measures related to person	Conditions and measures related to personal protection, hygiene and health evaluation			

 Dermal Protection 		No [Effectiveness Derm.	al: 0%]	
Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure		1 110 (=110011101101011111011011		
Place of use		Indoors		
 Process temperature 		Ambient (as solid)		
 Skin surface potentially exposed 		Two hands (960 cm2)		
3.8.2 Exposure concentrations and risk	s for v	vorkers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.005	mg/m³ (TRA Worker)	RCR = 0.071	
Inhalation, systemic, acute	0.02	mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.005	5 mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.02	mg/m³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.686	6 mg/m³ (TRA Worker)	RCR = 0.686	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.757	
3.9 Worker contributing scenario 8: (dedicated filling line, including weight			reparation into small containers	
3.9.1 Conditions of use				
Product characteristics				
Physical state		Solid		
 Dustiness of material 		Low		
Concentration of substance mixture		Substance as such (100	9%)	
Amount used, frequency and duration of use/expo				
Duration of activity		< 8 hours		
Technical and organizational conditions and	d meas	sures		
Other relevant operational conditions				
 General ventilation 		Basic general ventilation (1-3 air changes per hour)		
 Containment 		Closed system (minimal contact during routine operations)		
 Local exhaust ventilation 		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to person	al prote	ection, hygiene and health	n evaluation	
o Dermal Protection		No [Effectiveness Dermal: 0%]		
Respiratory Protection		No [Effectiveness Inhala	ation: 0%]	
Other conditions affecting workers exposure	е			
o Place of use		Indoors		
o Process temperature		Ambient (as solid)		
 Skin surface potentially exposed 		Two hands face (480 cm2)		

3.9.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	Exposure concentration		Risk characterisation	
Inhalation, systemic, long-term	0.01 mg/m³ (TRA Worker)		RCR = 0.143	
Inhalation, systemic, acute	0.04 mg/m ³	(TRA Worker)	Qualitative	
Inhalation, local, long-term	0.01 mg/m ³	(TRA Worker)	Qualitative	
Inhalation, local, acute	0.04 mg/m ³	(TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.686 mg/m	n ³ (TRA Worker)	RCR = 0.686	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.829	
3.10 Worker contributing scenario 9: compression, extrusion pelletisation			s or articles by tabletting,	
3.10.1 Conditions of use				
Product characteristics				
 Physical state 		Solid		
 Dustiness of material 		Low		
Concentration of substance mixtur	е	Substance as suc	Substance as such (100%)	
Amount used, frequency and duration of use/exposure				
Duration of activity		< 8 hours		
Technical and organizational conditions and measures				
Other relevant operational conditions				
o General ventilation		=	tilation (1-3 air changes per hour)	
o Containment		Closed system (m operations)	ninimal contact during routine	
o Local exhaust ventilation		No [Effectiveness	Inhalation: 0%]	
 Occupational Health and Safety M System 	_	Advanced		
Conditions and measures related to person protection, hygiene and health evaluation	al			
Dermal Protection		No [Effectiveness Dermal: 0%]		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure				
o Place of use		Indoors		
Process temperature		Ambient (as solid)		
Skin surface potentially exposed		Two hands face (4	480 cm2)	
3.10.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	Exposure	concentration	Risk characterisation	
Inhalation, systemic, long-term	0.01 mg/n	n ³ (TRA Worker)	RCR = 0.143	

Inhalation, systemic, acute	0.04 mg/n	n ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.01 mg/n	n ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.04 mg/n	n ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.343 mg/	m³ (TRA Worker)	RCR = 0.343	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.486	
3.11 Worker contributing scenario 10): Use as la	boratory agent (PROC 15)	
3.11.1 Conditions of use				
Product characteristics				
o Physical state		Solid		
o Dustiness of material		Low		
Concentration of substance mixtur	e	Substance as suc	h (100%)	
Amount used, frequency and duration of us	e/exposure			
o Duration of activity		< 8 hours		
Technical and organizational conditions and	d measures			
Other relevant operational conditions				
General ventilation		Basic general ven	tilation (1-3 air changes per hour)	
o Containment		Closed system (m operations)	inimal contact during routine	
Local exhaust ventilation		No [Effectiveness	Inhalation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal protection,		hygiene and health	evaluation	
Dermal Protection		No [Effectiveness	Dermal: 0%]	
Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure	9			
o Place of use		Indoors		
o Process temperature			Ambient (as solid)	
Skin surface potentially exposed			One hand face only (240 cm2)	
3.10.2 Exposure concentrations and ris	ks for worke	ers		
Route of exposure and type of effects	Exposure of	concentration	Risk characterisation	
Inhalation, systemic, long-term	0.07 mg/m ³	(TRA Worker)	RCR = 1	
Inhalation, systemic, acute	0.28 mg/m³ (TRA Worker)		Qualitative	
Inhalation, local, long-term	0.07 mg/m³ (TRA Worker)		Qualitative	
Inhalation, local, acute	0.28 mg/m ³	(TRA Worker)	Qualitative	

Dermal, systemic, long-term	0.34 mg/m ³ (TRA Worker)	RCR = 0.34	
Dermal, systemic, acute		Qualitative	
Combined routes, systemic, long-term		RCR = 1.34	
4. Risk Management Measures (RMM)			

4. Risk Management Measures (RMM)				
4.1 RMMs related to workers				
	Workers in the identified process/areas should be trained (a) to avoid work without protection and (b) to understand the respiratory effects of potassium iodide and (c) to follow the safer procedures instructed by the employer			
Organisational measures	General occupational hygiene measures are required to ensure safe handling of the substance. Good occupational hygiene practices have to be followed (e.g. shower and change clothes at end of work shift) to avoid any contamination of private households via the work-home-interface.			
	Avoid inhalation or ingestion. Do not eat and smoke in the workplace. Unless otherwise stated below, wear standard working clothes and shoes. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.			
	Regular training in workplace hygiene practice and proper use of personal protective equipment is required.			
	Use closed systems and covering open containers to avoid potential splashes.			
Technical measures	Store in cool, dry clean, well ventilated areas, away from oxidizer materials.			
Do not store under direct sun light.				
4.2 RMMs related to the environment				
Organisational measures	Procedural and/or control technologies are required to minimize emissions and the resulting exposure during cleaning and maintenance procedures.			
Abatement measures related with wastewater	Potassium iodide wastewater should be reused or iodine in them recovered.			
Abatement measures waste air and solid waste	Due to is negligible vapour pressure potassium iodide is not expected to be found in the solid waste nor to reach the air			
4.3 Waste related measures				
o Type of waste	Packaging materials			
Disposal technique	The containers and packaging materials should be disposed in accordance with local requirements.			

5. Prediction of exposure resulting from the conditions described above and the substance properties.

5.1 Human exposure	
Inhalation Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.035 mg/m³
Inhalation Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Long-term	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Acute	Aucun risque identifié.
Oral Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Oral Systemic effects - Acute	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Dermal Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 1 mg/kg bw/day
Dermal Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Dermal Local effects - Long-term	Aucun risque identifié.
Dermal Local effects - Acute	Aucun risque identifié.
Eyes Local effects	Aucun risque identifié.

5.2 Environmental exposure

5.2.1 Aquatic compartment (including sediment) - ECOSAR v.1.00 program operated by EPA

Organism	Duration	End Point	Result (mg/L)
Fish	96-hr	LC50	6736.780
Fish	14-day	LC50	6600.207
Daphnid	48-hr	LC50	2844.798
Green Algae	96-hr	EC50	577.397
Fish	30-day	CHV	615.632
Daphnid	-	CHV	241.908
Green Algae	-	CHV	159.232
Fish ((SW)	-	CHV	10867.097
Mysid Shrimp	96-hr	LC50	27123.457
Fish ((SW)	-	CHV	318.739
Mysid Shrimp (SW)	-	CHV	4186.333
Earthworm	14-day	LC50	460.463

5.2.2 Terrestrial compartment

The direct release to soil can be excluded for the exposure scenario. For indirect exposure to soil, firstly the low vapour pressure and high water solubility can prove that little iodide will distribute in air, which means no potassium iodide will be deposited from air.

Secondly, the adsorption to sludge can be excluded due to high water solubility and low adsorption potential; thus the indirect exposure to soil on sludge application can be ruled out. In conclusion, the exposure to soil is unlikely.

6. PBT and vPvB assessment

PBT assessment does not apply.

According to REACH regulation 1907/2006 Annex XIII PBT/vPvB assessment does not apply for inorganic substances.

2. EXPOSURE SCENARIOS FOR THE FORMULATION OF PREPARATIONS

1. Short title of scenario 2

Mixing and blending of substances into (chemical) preparations in all types of formulating industries

2. Description and processes covered in the exposure scenario

Sector of use (SU)	SU 3: Uses of substances as such or in preparations at industrial sites
	SU 10: Formulation [mixing] of preparations and/or repackaging (excluding alloys)
Product category (PC)	PC 19
Process category (PROC)	PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent
Article category (AC)	Not applicable
Environmental release category (ERC)	ERC 2: Formulation of preparations

3. Exposure scenario 1: Formulation of preparations

3.1 Environmental contributing scenario 1 Conditions of use Not defined Releases Not defined

Exposure risks for the environment and man via environment:

Potassium iodide is very stable under ordinary conditions of use and storage. The phototransformation in air is irrelevant to potassium iodide, because few potassium iodide can be distributed in air for the low vapour pressure and high water solubility

Hydrolysis is not a concern to such inorganic substance which can be completely ionized in water phase. Potassium iodide will completely dissociate in water giving potassium ion and iodide anion

The potassium iodide is readily absorbed by organisms as K+ and I-, which are both small (an)ions and well known not likely to be bioaccumulated

Based on the intrinsic prosperities of potassium iodide, the substance can be expected to have a low potential for adsorption (completely ionized to small ions in water phase). The potassium ion and iodide anion are uniformly distributed in water phase. In the air, these two basic (an)ions is negligible, due to high water solubility and low vapour pressure. To sediment and soil phases, these two (an)ions are mostly distributed in the pore water.

3.2 Worker contributing scenario 1: Use in closed process, no likelihood of exposure (PROC 1)

3.2.1 Conditions of use (TRA Worker)	
Product characteristics	
o Physical state	Solid
 Dustiness of material 	Low
 Concentration of substance mixture 	Substance as such (100%)
Amount used, frequency and duration of use	/exposure
 Duration of activity 	< 8 hours
Technical and organizational conditions and measure	sures
Other relevant operational conditions	
 General ventilation 	Basic general ventilation (1-3 air changes per hour)
o Containment	Closed system (minimal contact during routine operations)
o Local exhaust ventilation	No [Effectiveness Inhalation: 0%]
 Occupational Health and Safety Management System 	Advanced
Conditions and measures related to personal prot	ection, hygiene and health evaluation
o Dermal Protection	No [Effectiveness Dermal: 0%]
Respiratory Protection	No [Effectiveness Inhalation: 0%]
Other conditions affecting workers exposure	
o Place of use	Indoors
 Process temperature (for solid) 	Ambient (default)
 Skin surface potentially exposed 	One hand face only (240 cm2)
3.2.2 Exposure concentrations and risks for	workers

Route of exposure and type of effects	Expo	sure concentration	Risk characterisation		
Inhalation, systemic, long-term	0.01	mg/m³ (TRA Worker)	RCR = 0.143		
Inhalation, systemic, acute	0.04	mg/m ³ (TRA Worker)	Qualitative		
Inhalation, local, long-term	0.01	mg/m³ (TRA Worker)	Qualitative		
Inhalation, local, acute	0.04	mg/m³ (TRA Worker)	Qualitative		
Dermal, systemic, long-term	0.034	I mg/m³ (TRA Worker)	RCR = 0.034		
Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long-term			RCR = 0.177		
3.3 Worker contributing scenario 2: Use in closed process, continuous process with occasional controlled exposure (PROC 2)					
3.3.1 Conditions of use (TRA Worker)					
Product characteristics					
 Physical state 		Solid			
 Dustiness of material 		Low			
 Concentration of substance mixture 	Concentration of substance mixture Su		Substance as such (100%)		
Amount used, frequency and duration of us	e/expo	sure			
 Duration of activity 	< 8 hours				
Technical and organizational conditions and meas		ures			
Other relevant operational conditions					
General ventilation		Basic general ventilation (1-3 air changes per hour)			
o Containment		Closed system (minimal contact during routine operations)			
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]			
 Occupational Health and Safety Management System 		Advanced			
Conditions and measures related to personal protection, hygiene and health evaluation					
o Dermal Protection	o Dermal Protection		No [Effectiveness Dermal: 0%]		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]			
Other conditions affecting workers exposure					
o Place of use		Indoors			
o Process temperature (for solid)		Ambient (default)			
 Skin surface potentially exposed 		Two hands face (480 cm2)			
3.3.2 Exposure concentrations and risks for workers					

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.006 mg/m³ (TRA Worker)	RCR = 0.086
Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.006 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)	Qualitative

Dermal, systemic, long-term	0.822	2 mg/m ³ (TRA Worker)	RCR = 0.822	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.908	
3.4 Worker contributing scenario 3: (PROC 3)	Use ir	closed batch proces	ss (synthesis or formulation)	
3.4.1 Conditions of use (TRA Worker)				
Product characteristics				
 Physical state 		Solid		
 Dustiness of material 		Low		
 Concentration of substance mixtu 		Substance as such (100	0%)	
Amount used, frequency and duration of us	se/expo	1		
o Duration of activity		< 8 hours		
Technical and organizational conditions an	d meas	sures		
Other relevant operational conditions				
o General ventilation		Basic general ventilation	n (1-3 air changes per hour)	
 Containment 		Closed system (minima	l contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhala	alation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to persor	nal prot	ection, hygiene and healt	h evaluation	
o Dermal Protection		No [Effectiveness Dermal: 0%]		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposur	re			
 Place of use 		Indoors		
o Process temperature (for solid)		Ambient (default)		
 Skin surface potentially exposed 		One hand face only (240 cm2)		
3.4.2 Exposure concentrations and risl	ks for v	vorkers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.07	mg/m³ (TRA Worker)	RCR = 1	
Inhalation, systemic, acute	0.28	mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.07	mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.28	mg/m³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.69	mg/m ³ (TRA Worker)	RCR = 0.69	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 1.69	
3.5 Worker contributing scenario 4: opportunity for exposure arises (PR		batch and other pro	cess (synthesis) where	
3.5.1 Conditions of use (TRA Worker)				

Built delice of the		1			
Product characteristics		0-1:-1			
Physical state		Solid			
 Dustiness of material Concentration of substance mixture 		Low Substance on such (100%)			
Amount used, frequency and duratio		Substance as such (100%)			
Duration of activity	11 01 000/0/pc	< 8 hours			
Technical and organizational condition	ons and meas				
Other relevant operational conditions					
General ventilation	,	Rasic general ventilation	Basic general ventilation (1-3 air changes per hour)		
Containment		Closed system (minimal contact during routine operations)			
		No [Effectiveness Inhalation: 0%]			
 Local exhaust ventilation Occupational Health and Sa 	afety	-	111011. 070]		
Management System	-	Advanced	a cyclyntian		
Conditions and measures related to	personal prot	1			
Dermal Protection		No [Effectiveness Dermal: 0%]			
 Respiratory Protection 		No [Effectiveness Inhala	ition: 0%]		
Other conditions affecting workers ex	xposure	T			
 Place of use 		Indoors			
o Process temperature (for so		Ambient (default)			
 Skin surface potentially exposed 		Two hands face (480 cm2)			
3.5.2 Exposure concentrations a	nd risks for v	workers			
Route of exposure and type of effects	Exposure	concentration	Risk characterisation		
Inhalation, systemic, long-term	0.04 mg/m	³ (TRA Worker)	RCR = 0.571		
Inhalation, systemic, acute	0.8 mg/m ³	(TRA Worker)	Qualitative		
Inhalation, local, long-term	0.04 mg/m	³ (TRA Worker)	Qualitative		
Inhalation, local, acute	0.8 mg/m ³	(TRA Worker)	Qualitative		
Dermal, systemic, long-term	0.274 mg/r	n ³ (TRA Worker)	RCR = 0.274		
Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long-term			RCR = 0.846		
3.6 Worker contributing scenar					
preparations and articles (mult		l/or significant contac	t) (PROC 5)		
3.6.1 Conditions of use(TRA Wor	rker)	Τ			
Product characteristics					
Physical state		Solid			
Dustiness of material Concentration of substance	noiste en	Low			
 Concentration of substance Amount used, frequency and duratio 		Substance as such (100%)			
• • • • • • • • • • • • • • • • • • • •	use/expc				
Duration of activity		< 8 hours			

l measures				
Other relevant operational conditions				
o General ventilation Basic		c general ventilation (1-3 air changes per hour)		
o Containment Close		ed system (minimal contact during routine operations)		
No	Effectiveness Inhala	ation: 0%]		
Adv	anced			
al protection	n, hygiene and health evaluation			
No	Effectiveness Derma	al: 0%]		
No	[Effectiveness Inhalation: 0%]			
)				
Indo	oors			
Aml	oient (as solid)			
Two	hands face (480 cm	12)		
s for worke	ers			
Route of exposure and type of effects Exposur		Risk characterisation		
0.06 mg/	/m ³ (TRA Worker)	RCR = 0.857		
halation, systemic, acute 0.4 mg/m		Qualitative		
alation, local, long-term 0.06 mg/s		Qualitative		
nalation, local, acute 0.4 mg/m		Qualitative		
0.823 mg	g/m³ (TRA Worker)	RCR = 0.823		
		Qualitative		
outes, systemic, long-term		RCR = 1.68		
mamers	at non-dedicated	Tacilities (PROC 6a)		
	Calid			
Physical state				
Dustiness of material				
Concentration of substance mixture Amount used, frequency and duration of use/exposure		ы (100%)		
Duration of activity		< 8 hours		
Technical and organizational conditions and measures				
Other relevant operational conditions				
		ntilation (1-3 air changes per hour)		
General ventilation Containment		Closed system (minimal contact during routine operations)		
	Bas Clos No Adv al protection No No Indo Ami Two s for worke Exposur 0.06 mg/ 0.4 mg/r 0.823 mg Transfer o ontainers	Basic general ventilation Closed system (minimal No [Effectiveness Inhala Advanced al protection, hygiene and health No [Effectiveness Derma No [Effectiveness Inhala Indoors Ambient (as solid) Two hands face (480 cm s for workers Exposure concentration 0.06 mg/m³ (TRA Worker) 0.4 mg/m³ (TRA Worker) 0.4 mg/m³ (TRA Worker) 0.823 mg/m³ (TRA Worker) Indoors Solid Low Solid Low Substance or prontainers at non-dedicated Solid Low Substance as succeeded Solid Solid Solid Low Substance as succeeded Solid So		

		1		
o Local exhaust ventilation		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced	Advanced	
Conditions and measures related to personal protection, hygiene and health evaluation				
Dermal Protection		No [Effectivenes	s Dermal: 0%]	
o Respiratory Protection		No [Effectivenes		
Other conditions affecting workers exposure	e			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)	
 Skin surface potentially exposed 		Two hands (960	cm2)	
3.7.2 Exposure concentrations and risk	s for work	ers		
Route of exposure and type of effects	Exposure	concentration	Risk characterisation	
Inhalation, systemic, long-term	0.02 mg/r	n ³ (TRA Worker)	RCR = 0.286	
Inhalation, systemic, acute	0.4 mg/m	³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.02 mg/r	m ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.4 mg/m	³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.548 mg	/m³ (TRA Worker)	RCR = 0.548	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.834	
3.8 Worker contributing scenario 7: discharging) from/to vessels/large c				
3.8.1 Conditions of use (TRA Worker)			,	
Product characteristics				
o Physical state			d	
o Dustiness of material	Lov	1		
 Concentration of substance mixture 	re Sul	ibstance as such (100%)		
Amount used, frequency and duration of us	e/exposure			
o Duration of activity < 8		8 hours		
Technical and organizational conditions and measures				
Other relevant operational conditions				
o General ventilation Bas		asic general ventilation (1-3 air changes per hour)		
o Containment Clo		osed system (minimal contact during routine operations)		
o Local exhaust ventilation No		[Effectiveness Inhalation: 0%]		
Occupational Health and Safety Management System Ad		dvanced		
Conditions and measures related to person	n, hygiene and healt	h evaluation		
o Dermal Protection No [I		[Effectiveness Derm	Effectiveness Dermal: 0%]	

Respiratory Protection		No [Effectiveness Inhala	tion: 0%1		
Other conditions affecting workers exposure		No [Effectiveness filinalation: 0%]			
Place of useProcess temperature (for solid)	Ambient (default)				
Skin surface potentially exposed	Two hands (960 cm2)				
3.8.2 Exposure concentrations and risk	s for v				
Route of exposure and type of effects		sure concentration Risk characterisation			
Inhalation, systemic, long-term		mg/m³ (TRA Worker)	RCR = 0.286		
Inhalation, systemic, acute		ng/m³ (TRA Worker)	Qualitative		
Inhalation, local, long-term		mg/m³ (TRA Worker)	Qualitative		
Inhalation, local, acute		ng/m³ (TRA Worker)	Qualitative		
Dermal, systemic, long-term		B mg/m³ (TRA Worker)	RCR = 0.548		
	0.540	mg/m (TRA WORKE)			
Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long-term	_		RCR = 0.834		
3.9 Worker contributing scenario 8: (dedicated filling line, including weight			eparation into small containers		
3.9.1 Conditions of use (TRA Worker)	·····9/	(11000)			
Product characteristics					
Physical state			Solid		
Dustiness of material		Low			
Concentration of substance mixtur	re	Substance as such (100%)			
Amount used, frequency and duration of us	sure				
Duration of activity		< 8 hours			
Technical and organizational conditions and measures					
Other relevant operational conditions					
o General ventilation		Basic general ventilation (1-3 air changes per hour)			
 Containment 	o Containment		Closed system (minimal contact during routine operations)		
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]			
 Occupational Health and Safety Management System 		Advanced			
Conditions and measures related to personal protection, hygiene and health evaluation					
o Dermal Protection		No [Effectiveness Dermal: 0%]			
Respiratory Protection		No [Effectiveness Inhalation: 0%]			
Other conditions affecting workers exposure					
o Place of use		Indoors			
o Process temperature (for solid)	Process temperature (for solid)		Ambient (default)		
 Skin surface potentially exposed 		Two hands face (480 cm2)			
3.9.2 Exposure concentrations and risks for workers					

Route of exposure and type of effects	Exposure of	concentration	Risk characterisation	
Inhalation, systemic, long-term	0.06 mg/m³ (TRA Worker)		RCR = 0.857	
Inhalation, systemic, acute	0.4 mg/m³ (TRA Worker)		Qualitative	
Inhalation, local, long-term	0.06 mg/m³ (TRA Worker)		Qualitative	
Inhalation, local, acute	0.4 mg/m ³	(TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.823 mg/m	n ³ (TRA Worker)	RCR = 0.823	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.1.68	
3.10 Worker contributing scenario 9: compression, extrusion pelletisation			or articles by tabletting,	
3.10.1 Conditions of use				
Product characteristics				
 Physical state 		Solid		
 Dustiness of material 		Low		
 Concentration of substance mixtur 	е	Substance as such (100%)		
Amount used, frequency and duration of us	e/exposure			
 Duration of activity 		< 8 hours		
Technical and organizational conditions and measures				
Other relevant operational conditions				
o General ventilation		Basic general ven	tilation (1-3 air changes per hour)	
o Containment		Closed system (minimal contact during routine operations)		
o Local exhaust ventilation		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal protection, hygiene and health evaluation				
Dermal Protection		No [Effectiveness Dermal: 0%]		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure	Other conditions affecting workers exposure			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
Skin surface potentially exposed		Two hands face (480 cm2)		
3.10.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	Exposure	concentration	Risk characterisation	
Inhalation, systemic, long-term	0.02 mg/r	n ³ (TRA Worker)	RCR = 0.286	
Inhalation, systemic, acute	0.08 mg/m³ (TRA Worker)		Qualitative	

Inhalation, local, long-term	0.02 mg/m³ (TRA Worker)		Qualitative
Inhalation, local, acute	0.08 mg/m³ (TRA Worker)		Qualitative
Dermal, systemic, long-term	0.686 mg/m³ (TRA Worker)		RCR = 0.686
Dermal, systemic, acute			Qualitative
Combined routes, systemic, long-term			RCR = 0.972
3.11 Worker contributing scenario 10	: Use as la	boratory agent (PROC 15)
3.11.1 Conditions of use (TRA Worker)			
Product characteristics			
o Physical state		Solid	
Dustiness of material		Low	
Concentration of substance mixture	9	Substance as suc	h (100%)
Amount used, frequency and duration of use	e/exposure		
Duration of activity		< 8 hours	
Technical and organizational conditions and	measures		
Other relevant operational conditions			
General ventilation		Basic general ventilation (1-3 air changes per hour)	
 Containment 		Closed system (minimal contact during routine operations)	
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]	
Occupational Health and Safety Management System		Advanced	
Conditions and measures related to personal protection, hygiene and health evaluation			
o Dermal Protection		No [Effectiveness Dermal: 0%]	
Respiratory Protection		No [Effectiveness Inhalation: 0%]	
Other conditions affecting workers exposure	;		
o Place of use		Indoors	
o Process temperature (for solid)		Ambient (default)	
Skin surface potentially exposed		One hand face only (240 cm2)	
3.10.2 Exposure concentrations and risl	ks for worke	ers	
Route of exposure and type of effects Exposure of		concentration	Risk characterisation
Inhalation, systemic, long-term	0.07 mg/m ³	(TRA Worker)	RCR = 1
Inhalation, systemic, acute	0.28 mg/m ³	(TRA Worker)	Qualitative
Inhalation, local, long-term	0.07 mg/m³ (TRA Worker)		Qualitative
Inhalation, local, acute	0.28 mg/m³ (TRA Worker)		Qualitative
Dermal, systemic, long-term	0.34 mg/m³ (TRA Worker)		RCR = 0.34

Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long-term			RCR = 1.34		
4. Risk Management Measures (RMM)					
4.1 RMMs related to workers					
	Workers in the identified process/areas should be trained (a) to a work without protection and (b) to understand the respiratory effect potassium iodide and (c) to follow the safer procedures instructed by employer				
 Organisational measures 	General occupational hygiene measures are required to ensure safe handling of the substance. Good occupational hygiene practices have to be followed (e.g. shower and change clothes at end of work shift) to avoid any contamination of private households via the work-home-interface.				
	Avoid inhalation or ingestion. Do not eat and smoke in the workplace. Unless otherwise stated below, wear standard working clothes and shoes. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.				
	Regular training in workplace hygiene practice and proper use of personal protective equipment is required.				
	Use closed systems and covering open containers to avoid potential splashes				
o Technical measures	Store in cool, dry clean, well ventilated areas, away from oxidizer materials.				
Do not store under direct sun light					
4.2 RMMs related to the environment	1				
o Organisational measures			es are required to minimize emissions aning and maintenance procedures.		
Abatement measures related with wastewater	Potassium iodide wastewater should be reused or iodine in them recovered.				
 Abatement measures waste air and solid waste 	Due to is negligible vapour pressure potassium iodide is not expected to be found in the solid waste nor to reach the air.				
4.3 Waste related measures					
o Type of waste	Pacl	kaging materials			
o Disposal technique	The containers and packaging materials should be disposed in accordance with local requirements.				
5. Prediction of exposure resulting from the conditions described above and the substance properties.					

Inhalation Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.035 mg/m³
Inhalation Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Long-term	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Acute	Aucun risque identifié.
Oral Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Oral Systemic effects - Acute	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Dermal Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 1 mg/kg bw/day
Dermal Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Dermal Local effects - Long-term	Aucun risque identifié.
Dermal Local effects - Acute	Aucun risque identifié.
Eyes Local effects	Aucun risque identifié.

5.2 Environmental exposure

5.2.1 Aquatic compartment (including sediment) - ECOSAR v.1.00 program operated by EPA

Organism	Duration	End Point	Result (mg/L)
Fish	96-hr	LC50	6736.780
Fish	14-day	LC50	6600.207
Daphnid	48-hr	LC50	2844.798
Green Algae	96-hr	EC50	577.397
Fish	30-day	CHV	615.632
Daphnid	-	CHV	241.908
Green Algae	-	CHV	159.232
Fish ((SW)	-	CHV	10867.097
Mysid Shrimp	96-hr	LC50	27123.457
Fish ((SW)	-	CHV	318.739
Mysid Shrimp (SW)	-	CHV	4186.333
Earthworm	14-day	LC50	460.463

5.2.2 Terrestrial compartment

The direct release to soil can be excluded for the exposure scenario. For indirect exposure to soil, firstly the low vapour pressure and high water solubility can prove that little iodide will distribute in air, which means no potassium iodide will be deposited from air.

Secondly, the adsorption to sludge can be excluded due to high water solubility and low adsorption potential; thus the indirect exposure to soil on sludge application can be ruled out. In conclusion, the exposure to soil is unlikely.

6. PBT and vPvB assessment

PBT assessment does not apply.

According to REACH regulation 1907/2006 Annex XIII PBT/vPvB assessment does not apply for inorganic substances.

3. EXPOSURE SCENARIOS FOR USE AT INDUSTRIAL SITES

1. Short title of scenario 3

Mixing or blending of substances which will be physically or chemically bound into or onto a matrix (material) such as plastics additives in master batches or plastic compounds.

matrix (material) such as plastics additives in master batches or plastic compounds.			
2. Description and processes covered in the exposure scenario			
Sector of upo (SII)	SU 3: Uses of substances as such or in preparations at industrial sites		
Sector of use (SU)	SU 10: Formulation [mixing] of preparations and/or repackaging (excluding alloys)		
Product category (PC)	PC 19		
Process category (PROC)	PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent		
Article category (AC)	Not applicable		
Environmental release category (ERC)	ERC 5: Formulation in materials		

3. Exposure scenario 1 : Formulation in materials

3.1 Environmental contributing scenario 1

Conditions of use	Not defined
Releases	Not defined

Exposure risks for the environment and man via environment:

Potassium iodide is very stable under ordinary conditions of use and storage. The phototransformation in air is irrelevant to potassium iodide, because few potassium iodide can be distributed in air for the low vapour pressure and high water solubility

Hydrolysis is not a concern to such inorganic substance which can be completely ionized in water phase. Potassium iodide will completely dissociate in water giving potassium ion and iodide anion

The potassium iodide is readily absorbed by organisms as K+ and I-, which are both small (an)ions and well known not likely to be bioaccumulated

Based on the intrinsic prosperities of potassium iodide, the substance can be expected to have a low potential for adsorption (completely ionized to small ions in water phase). The potassium ion and iodide anion are uniformly distributed in water phase. In the air, these two basic (an)ions is negligible, due to high water solubility and low vapour pressure. To sediment and soil phases, these two (an)ions are mostly distributed in the pore water.

3.2 Worker contributing scenario 1: Use in closed process, no likelihood of exposure (PROC 1)

3.2.1 Conditions of use (TRA Worker)					
Product characteristics					
 Physical state 	Solid				
 Dustiness of material 	Low				
 Concentration of substance mixture 	Substance as such (100%)				
Amount used, frequency and duration of use/exposure					
 Duration of activity 	< 8 hours				
Technical and organizational conditions and meas	sures				
Other relevant operational conditions					
o General ventilation	Basic general ventilation (1-3 air changes per hour)				
 Containment 	Closed system (minimal contact during routine operations)				
 Local exhaust ventilation 	No [Effectiveness Inhalation: 0%]				
 Occupational Health and Safety Management System 	Advanced				
Conditions and measures related to personal prote	ection, hygiene and health evaluation				
o Dermal Protection	No [Effectiveness Dermal: 0%]				
Respiratory Protection	No [Effectiveness Inhalation: 0%]				
Other conditions affecting workers exposure					
o Place of use	Indoors				
 Process temperature (for solid) 	Ambient (default)				
 Skin surface potentially exposed 	One hand face only (240 cm2)				
3.2.2 Exposure concentrations and risks for workers					

3.2.2 Exposure concentrations and risks for workers

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.01 mg/m³ (TRA Worker)	RCR = 0.143

Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)		Qualitative
Inhalation, local, long-term	0.01 mg/m³ (TRA Worker)		Qualitative
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)		Qualitative
Dermal, systemic, long-term	0.034 mg/m³ (TRA Worker)		RCR = 0.034
Dermal, systemic, acute			Qualitative
Combined routes, systemic, long-term			RCR = 0.177
3.3 Worker contributing scenario 2: occasional controlled exposure (PR		n closed process, con	tinuous process with
3.3.1 Conditions of use (TRA Worker)			
Product characteristics			
 Physical state 		Solid	
 Dustiness of material 		Low	
 Concentration of substance mixture 	re	Substance as such (100	%)
Amount used, frequency and duration of us	se/expc	sure	
 Duration of activity 		< 8 hours	
Technical and organizational conditions and	d meas	sures	
Other relevant operational conditions			
 General ventilation 		Basic general ventilation (1-3 air changes per hour)	
o Containment		Closed system (minimal	contact during routine operations)
Local exhaust ventilation		No [Effectiveness Inhala	tion: 0%]
 Occupational Health and Safety Management System 		Advanced	
Conditions and measures related to person	al prot	ection, hygiene and health	n evaluation
 Dermal Protection 		No [Effectiveness Derma	al: 0%]
Respiratory Protection		No [Effectiveness Inhalation: 0%]	
Other conditions affecting workers exposur	е		
o Place of use		Indoors	
o Process temperature (for solid)		Ambient (default)	
 Skin surface potentially exposed 		Two hands face (480 cm2)	
3.3.2 Exposure concentrations and risk	s for v	workers	
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation
Inhalation, systemic, long-term 0.006		6 mg/m³ (TRA Worker)	RCR = 0.086
Inhalation, systemic, acute	0.04	mg/m ³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.006	6 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)		Qualitative
Dermal, systemic, long-term	0.822 mg/m³ (TRA Worker)		RCR = 0.822

Qualitative

Dermal, systemic, acute

Combined routes, systemic, long-term			RCR = 0.908	
3.4 Worker contributing scenario 3: (PROC 3)	Use ir	n closed batch proces	ss (synthesis or formulation)	
3.4.1 Conditions of use (TRA Worker)				
Product characteristics				
 Physical state 		Solid		
 Dustiness of material 		Low		
 Concentration of substance mixture 		Substance as such (10	0%)	
Amount used, frequency and duration of us	se/expo	sure		
 Duration of activity 		< 8 hours		
Technical and organizational conditions an	d meas	sures		
Other relevant operational conditions				
 General ventilation 		Basic general ventilatio	n (1-3 air changes per hour)	
o Containment		Closed system (minima	I contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhal	ation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to persor	nal prot	ection, hygiene and healt	h evaluation	
 Dermal Protection 		No [Effectiveness Dermal: 0%]		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposur	е			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
 Skin surface potentially exposed 		One hand face only (24	0 cm2)	
3.4.2 Exposure concentrations and risk	ks for v	vorkers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.07	mg/m ³ (TRA Worker)	RCR = 1	
Inhalation, systemic, acute	0.28	mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.07	mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.28	mg/m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term 0.69		mg/m ³ (TRA Worker)	RCR = 0.69	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 1.69	
3.5 Worker contributing scenario 4: opportunity for exposure arises (PR			cess (synthesis) where	
3.5.1 Conditions of use (TRA Worker)				
Product characteristics				
Physical state		Solid		

			Low		
Concentration of substance mixture Amount used, frequency and duration of use/expose		Substance as such (100%)			
	ation of use/expo	_			
Duration of activity		< 8 hours			
Technical and organizational cor		sures			
Other relevant operational condi	tions				
o General ventilation		+	n (1-3 air changes per hour)		
 Containment 			I contact during routine operations)		
 Local exhaust ventilation 		No [Effectiveness Inhala	ation: 0%]		
 Occupational Health an Management System 	d Safety	Advanced			
Conditions and measures related	d to personal prot	ection, hygiene and healt	h evaluation		
o Dermal Protection		No [Effectiveness Derm	al: 0%]		
o Respiratory Protection		No [Effectiveness Inhala	ation: 0%]		
Other conditions affecting worke	rs exposure				
o Place of use		Indoors			
 Process temperature (for 	or solid)	Ambient (default)			
 Skin surface potentially 	exposed	Two hands face (480 cm2)			
3.5.2 Exposure concentration	s and risks for	workers			
Route of exposure and type of	effects Expo	osure concentration	Risk characterisation		
Inhalation, systemic, long-term	0.04	mg/m ³ (TRA Worker)	RCR = 0.571		
Inhalation, systemic, acute	0.8 n	ng/m³ (TRA Worker)	Qualitative		
Inhalation, local, long-term	0.04	mg/m ³ (TRA Worker)	Qualitative		
Inhalation, local, acute	0.8 n	ng/m³ (TRA Worker)	Qualitative		
Dermal, systemic, long-term	0.27	4 mg/m ³ (TRA Worker)	RCR = 0.274		
Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long	j-term		RCR = 0.846		
3.6 Worker contributing sce preparations and articles (r			n processes for formulation of et) (PROC 5)		
3.6.1 Conditions of use(TRA	Worker)				
Product characteristics	Product characteristics				
 Physical state 	o Physical state		Solid		
 Dustiness of material 		Low			
Concentration of substa		Substance as such (100%)			
Amount used, frequency and duration of use/exposure					
Duration of activity		< 8 hours			
Technical and organizational conditions and measures					
Other relevant operational condi	tions				

 General ventilation 	o General ventilation Basic		general ventilation (1-3 air changes per hour)		
o Containment Clos		sed system (minimal contact during routine operations)			
-		[Effectiveness Inhalation: 0%]			
Occupational Health and Safety Management System Adv.		/anced			
Conditions and measures related to personal	l protectio	n, hygiene and health	evaluation		
o Dermal Protection	No	[Effectiveness Derma	al: 0%]		
o Respiratory Protection	No	[Effectiveness Inhala	tion: 0%]		
Other conditions affecting workers exposure					
o Place of use	Ind	oors			
 Process temperature 	Am	bient (as solid)			
 Skin surface potentially exposed 	Two	o hands face (480 cm	2)		
3.6.2 Exposure concentrations and risks	for work	ers			
Route of exposure and type of effects	Exposu	re concentration	Risk characterisation		
Inhalation, systemic, long-term	0.06 mg	/m ³ (TRA Worker)	RCR = 0.857		
Inhalation, systemic, acute	0.4 mg/ı	m ³ (TRA Worker)	Qualitative		
Inhalation, local, long-term	0.06 mg	/m ³ (TRA Worker)	Qualitative		
Inhalation, local, acute 0.4 r		m ³ (TRA Worker)	Qualitative		
Dermal, systemic, long-term 0.823 m		g/m ³ (TRA Worker)	RCR = 0.823		
Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long-term			RCR = 1.68		
3.7 Worker contributing scenario 6: To					
discharging) from/to vessels/large co	ntainers	at non-dedicated	facilities (PROC 8a)		
3.7.1 Conditions of use (TRA Worker)					
Product characteristics					
o Physical state		Solid			
 Dustiness of material 		Low			
 Concentration of substance mixture 		Substance as such (100%)			
Amount used, frequency and duration of use/exposure					
o Duration of activity		< 8 hours			
Technical and organizational conditions and	Technical and organizational conditions and measures				
Other relevant operational conditions					
o General ventilation		Basic general ven	Basic general ventilation (1-3 air changes per hour)		
o Containment		Closed system (m operations)	Closed system (minimal contact during routine operations)		
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]			
 Occupational Health and Safety Man 	nagement	Advanced			
	_				

System				
Conditions and measures related to personal				
protection, hygiene and health evaluation o Dermal Protection				
		No [Effectiveness		
o Respiratory Protection		No [Effectiveness	s Inhalation: 0%]	
Other conditions affecting workers exposur	е			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
o Skin surface potentially exposed		Two hands (960 d	cm2)	
3.7.2 Exposure concentrations and risk	s for wor	rkers		
Route of exposure and type of effects	Exposu	re concentration	Risk characterisation	
Inhalation, systemic, long-term	0.02 mg	y/m³ (TRA Worker)	RCR = 0.286	
Inhalation, systemic, acute	0.4 mg/	m ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.02 mg	y/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.4 mg/	m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.548 m	ng/m³ (TRA Worker)	RCR = 0.548	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.834	
3.8 Worker contributing scenario 7: Transfedischarging) from/to vessels/large contain				
3.8.1 Conditions of use (TRA Worker)			· · · · · · · · · · · · · · · · · · ·	
Product characteristics				
o Physical state		olid		
Dustiness of material		ow		
Concentration of substance mixture	•	Substance as such (100	0%)	
Amount used, frequency and duration of us	se/exposu	re		
 Duration of activity 		< 8 hours		
Technical and organizational conditions and	d measure	es		
Other relevant operational conditions				
		Basic general ventilation (1-3 air changes per hour)		
o Containment C		Closed system (minimal contact during routine operations)		
		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to person	nal protect	ion, hygiene and health	n evaluation	
o Dermal Protection No		No [Effectiveness Dermal: 0%]		
o Respiratory Protection No		No [Effectiveness Inhalation: 0%]		

Other conditions affecting workers exposur	re			
o Place of use In		Indoors		
o Process temperature (for solid)	Process temperature (for solid)			
 Skin surface potentially exposed 		Two hands (960 cm2)		
3.8.2 Exposure concentrations and risk	ks for v	workers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.02	mg/m ³ (TRA Worker)	RCR = 0.286	
Inhalation, systemic, acute	0.4 m	ng/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.02	mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.4 n	ng/m³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.548	3 mg/m³ (TRA Worker)	RCR = 0.548	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.834	
3.9 Worker contributing scenario 8:	Trans	fer of substance or pr	eparation into small containers	
(dedicated filling line, including wei	ghing)	(PROC 9)		
3.9.1 Conditions of use (TRA Worker)		T		
Product characteristics				
o Physical state		Solid		
 Dustiness of material Concentration of substance mixture 		Low (400	0/)	
Amount used, frequency and duration of us		Substance as such (100	%)	
Duration of activity		< 8 hours		
Technical and organizational conditions and measures				
Other relevant operational conditions				
General ventilation		Basic general ventilation	(1-3 air changes per hour)	
o Containment		Closed system (minimal contact during routine operations)		
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]		
Occupational Health and Safety		Advanced		
Management System Conditions and measures related to persor	nal prot	<u>l</u> ection, hygiene and health	evaluation	
o Dermal Protection		No [Effectiveness Dermal: 0%]		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposur	re			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
 Skin surface potentially exposed 		Two hands face (480 cm	n2)	
3.9.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects				

Inhalation, systemic, long-term	0.06 mg/m ³	(TRA Worker)	RCR = 0.857	
Inhalation, systemic, acute	0.4 mg/m ³	(TRA Worker)	Qualitative	
Inhalation, local, long-term	0.06 mg/m ³	(TRA Worker)	Qualitative	
Inhalation, local, acute	0.4 mg/m ³	(TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.823 mg/m	n ³ (TRA Worker)	RCR = 0.823	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.1.68	
3.10 Worker contributing scenario 9: compression, extrusion pelletisation			s or articles by tabletting,	
3.10.1 Conditions of use				
Product characteristics				
o Physical state		Solid		
o Dustiness of material		Low		
Concentration of substance mixtur	e	Substance as suc	ch (100%)	
Amount used, frequency and duration of us	e/exposure			
o Duration of activity		< 8 hours		
Technical and organizational conditions and	d measures			
Other relevant operational conditions				
General ventilation		Basic general ver	ntilation (1-3 air changes per hour)	
 Containment 		Closed system (n operations)	ninimal contact during routine	
Local exhaust ventilation		No [Effectiveness	Inhalation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal protection, hygiene and health evaluation				
Dermal Protection		No [Effectiveness Dermal: 0%]		
Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure				
o Place of use			Indoors	
o Process temperature (for solid)	o Process temperature (for solid)		Ambient (default)	
Skin surface potentially exposed	Skin surface potentially exposed		Two hands face (480 cm2)	
3.10.2 Exposure concentrations and ris				
Route of exposure and type of effects	Route of exposure and type of effects Exposure		Risk characterisation	
Inhalation, systemic, long-term	0.02 mg/r	n ³ (TRA Worker)	RCR = 0.286	
Inhalation, systemic, acute	0.08 mg/r	n ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term 0.02 mg/n		n ³ (TRA Worker)	Qualitative	
		1		

Inhalation, local, acute	0.08 mg/m³ (TRA Worker)		Qualitative
Dermal, systemic, long-term	0.686 mg/m³ (TRA Worker)		RCR = 0.686
Dermal, systemic, acute			Qualitative
Combined routes, systemic, long-term			RCR = 0.972
3.11 Worker contributing scenario 10	: Use as la	boratory agent (PROC 15)
3.11.1 Conditions of use (TRA Worker)			
Product characteristics			
 Physical state 		Solid	
 Dustiness of material 		Low	
Concentration of substance mixture	Э	Substance as suc	h (100%)
Amount used, frequency and duration of use	e/exposure		
 Duration of activity 		< 8 hours	
Technical and organizational conditions and	measures		
Other relevant operational conditions			
o General ventilation		Basic general ventilation (1-3 air changes per hour)	
 Containment 		Closed system (minimal contact during routine operations)	
Local exhaust ventilation		No [Effectiveness	Inhalation: 0%]
 Occupational Health and Safety Management System 		Advanced	
Conditions and measures related to personal			
protection, hygiene and health evaluation o Dermal Protection		No [Effectiveness	Dermal: 0%1
Respiratory Protection		No [Effectiveness Inhalation: 0%]	
Other conditions affecting workers exposure	1	i to [Emoduromodo	
Place of use		Indoors	
Process temperature (for solid)		Ambient (default)	
Skin surface potentially exposed		One hand face only (240 cm2)	
3.10.2 Exposure concentrations and ris	ks for worke		, , , , , , , , , , , , , , , , , , ,
Route of exposure and type of effects		concentration	Risk characterisation
Inhalation, systemic, long-term	0.07 mg/m ³	(TRA Worker)	RCR = 1
Inhalation, systemic, acute	0.28 mg/m ³	(TRA Worker)	Qualitative
Inhalation, local, long-term	0.07 mg/m ³	(TRA Worker)	Qualitative
Inhalation, local, acute	0.28 mg/m ³	(TRA Worker)	Qualitative
Dermal, systemic, long-term	0.34 mg/m ³	(TRA Worker)	RCR = 0.34
Dermal, systemic, acute			Qualitative

Combined routes, systemic, long-term	n	RCR = 1.34		
4. Risk Management Measures (RMM)				
	•	,		
4.1 RMMs related to workers	ı			
	Workers in the identified process/areas should be trained (a) to avoid work without protection and (b) to understand the respiratory effects of potassium iodide and (c) to follow the safer procedures instructed by the employer			
Organisational measures	General occupational hygiene measures are required to ensure safe handling of the substance. Good occupational hygiene practices have to be followed (e.g. shower and change clothes at end of work shift) to avoid any contamination of private households via the work-home-interface.			
	Avoid inhalation or ingestion. Do not eat and smoke in the workplace. Unless otherwise stated below, wear standard working clothes and shoes. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.			
		r training in workplace hygiene practice and proper use of personal ve equipment is required.		
	Use closed systems and covering open containers to avoid potential splashes			
Technical measures	Store in cool, dry clean, well ventilated areas, away from oxidizer materials.			
	Do not	store under direct sun light		
4.2 RMMs related to the environment				
Organisational measures		ural and/or control technologies are required to minimize emissions resulting exposure during cleaning and maintenance procedures.		
Abatement measures related with wastewater	Potassium iodide wastewater should be reused or iodine in them recovered.			
Abatement measures waste air and solid waste	Due to is negligible vapour pressure potassium iodide is not expected to be found in the solid waste nor to reach the air			
4.3 Waste related measures				
Type of waste	Packag	ing materials		
Disposal technique	The containers and packaging materials should be disposed in accordance with local requirements.			
5. Prediction of exposure resulting from the conditions described above and the substance properties.				
5.1 Human exposure				
Inhalation Systemic effects - Long-ter	m DNE	EL (Dose dérivée sans effet): 0.035 mg/m³		

Inhalation Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).	
Inhalation Local effects - Long-term	Risque inconnu (aucune autre information nécéssaire).	
Inhalation Local effects - Acute	Aucun risque identifié.	
Oral Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day	
Oral Systemic effects - Acute	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day	
Dermal Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 1 mg/kg bw/day	
Dermal Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).	
Dermal Local effects - Long-term	Aucun risque identifié.	
Dermal Local effects - Acute	Aucun risque identifié.	
Eyes Local effects	Aucun risque identifié.	

5.2 Environmental exposure

5.2.1 Aquatic compartment (including sediment) - ECOSAR v.1.00 program operated by EPA

Organism	Duration	End Point	Result (mg/L)
Fish	96-hr	LC50	6736.780
Fish	14-day	LC50	6600.207
Daphnid	48-hr	LC50	2844.798
Green Algae	96-hr	EC50	577.397
Fish	30-day	CHV	615.632
Daphnid	-	CHV	241.908
Green Algae	-	CHV	159.232
Fish ((SW)	-	CHV	10867.097
Mysid Shrimp	96-hr	LC50	27123.457
Fish ((SW)	-	CHV	318.739
Mysid Shrimp (SW)	-	CHV	4186.333
Earthworm	14-day	LC50	460.463

5.2.2 Terrestrial compartment

The direct release to soil can be excluded for the exposure scenario. For indirect exposure to soil, firstly the low vapour pressure and high water solubility can prove that little iodide will distribute in air, which means no potassium iodide will be deposited from air.

Secondly, the adsorption to sludge can be excluded due to high water solubility and low adsorption potential; thus the indirect exposure to soil on sludge application can be ruled out. In conclusion, the exposure to soil is unlikely.

6. PBT and vPvB assessment

PBT assessment does not apply.

According to REACH regulation 1907/2006 Annex XIII PBT/vPvB assessment does not apply for inorganic substances.

1. Short title of scenario 4

Formulation [mixing] of preparations including food additives, cleaning products, offshore drilling and pharmaceutical applications

2. Description and processes covered in the exposure scenario

	•
	SU2a: Mining, (without offshore industries)
	SU2b: Offshore industries
Sector of use (SU)	SU 3: Uses of substances as such or in preparations at industrial sites
	SU 9: Manufacture of fine chemicals
	SU 10: Formulation [mixing] of preparations and/or repackaging (excluding alloys)
Product category (PC)	PC19, PC20, PC21
Process category (PROC)	PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent
Article category (AC)	Not applicable
Environmental release category (ERC)	ERC 2: Formulations of preparations

3. Exposure scenario 1: Formulation of preparations

3.1 Environmental contributing scenario 1

Conditions of use	Not defined		
Releases	Not defined		
Exposure risks for the environment and man via environment:			

Potassium iodide is very stable under ordinary conditions of use and storage. The phototransformation in air is irrelevant to potassium iodide, because few potassium iodide can be distributed in air for the low vapour pressure and high water solubility

Hydrolysis is not a concern to such inorganic substance which can be completely ionized in water phase. Potassium iodide will completely dissociate in water giving potassium ion and iodide anion

The potassium iodide is readily absorbed by organisms as K+ and I-, which are both small (an)ions and well known not likely to be bioaccumulated

Based on the intrinsic prosperities of potassium iodide, the substance can be expected to have a low potential for adsorption (completely ionized to small ions in water phase). The potassium ion and iodide anion are uniformly distributed in water phase. In the air, these two basic (an)ions is negligible, due to high water solubility and low vapour pressure. To sediment and soil phases, these two (an)ions are mostly distributed in the pore water.

3.2 Worker contributing scenario 1: Use in closed process, no likelihood of exposure (PROC 1)

3.2.1 Conditions of use (TRA Worker)				
Product characteristics				
 Physical state 	Solid			
 Dustiness of material 	Low			
 Concentration of substance mixture 	Substance as such (100%)			
Amount used, frequency and duration of use	/exposure			
 Duration of activity 	< 8 hours			
Technical and organizational conditions and meas	sures			
Other relevant operational conditions				
 General ventilation 	Basic general ventilation (1-3 air changes per hour)			
 Containment 	Closed system (minimal contact during routine operations)			
 Local exhaust ventilation 	No [Effectiveness Inhalation: 0%]			
 Occupational Health and Safety Management System 	Advanced			
Conditions and measures related to personal prote	ection, hygiene and health evaluation			
o Dermal Protection	No [Effectiveness Dermal: 0%]			
Respiratory Protection	No [Effectiveness Inhalation: 0%]			
Other conditions affecting workers exposure				
o Place of use	Indoors			
 Process temperature (for solid) 	Ambient (default)			
 Skin surface potentially exposed 	One hand face only (240 cm2)			

3.2.2 Exposure concentrations and risks for workers

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.01 mg/m³ (TRA Worker)	RCR = 0.143
Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.01 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)	Qualitative

Dermal, systemic, long-term	0.034	mg/m ³ (TRA Worker)	RCR = 0.034	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.177	
3.3 Worker contributing scenario 2: occasional controlled exposure (PR		closed process, cont	inuous process with	
3.3.1 Conditions of use (TRA Worker)				
Product characteristics				
Physical state		Solid		
 Dustiness of material 		Low		
 Concentration of substance mixture 	re	Substance as such (100%	%)	
Amount used, frequency and duration of us	se/expo	sure		
 Duration of activity 		< 8 hours		
Technical and organizational conditions and	d meas	ures		
Other relevant operational conditions				
 General ventilation 		Basic general ventilation (1-3 air changes per hour)		
 Containment 		Closed system (minimal contact during routine operations)		
 Local exhaust ventilation 		No [Effectiveness Inhalation: 0%]		
Occupational Health and Safety Management System		Advanced otection, hygiene and health evaluation		
Conditions and measures related to personal protection, hygiene and health evaluation				
o Dermal Protection		No [Effectiveness Derma	•	
Respiratory Protection		No [Effectiveness Inhalat	ion: 0%]	
Other conditions affecting workers exposur	e			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
 Skin surface potentially exposed 		Two hands face (480 cm	12)	
3.3.2 Exposure concentrations and risk	ks for w	vorkers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.006	mg/m³ (TRA Worker)	RCR = 0.086	
Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)		Qualitative	
Inhalation, local, long-term	0.006 mg/m³ (TRA Worker)		Qualitative	
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)		Qualitative	
Dermal, systemic, long-term	0.822 mg/m ³ (TRA Worker)		RCR = 0.822	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.908	

3.4 Worker contributing scenario 3: Use in closed batch process (synthesis or formulation) (PROC 3)

3.4.1 Conditions of use (TRA Worker)				
Product characteristics				
o Physical state		Solid		
o Dustiness of material		Low		
 Concentration of substance mixtur 		Substance as such (10	0%)	
Amount used, frequency and duration of us	e/expc	T		
Duration of activity		< 8 hours		
Technical and organizational conditions and	meas	sures		
Other relevant operational conditions				
 General ventilation 		Basic general ventilation (1-3 air changes per hour)		
 Containment 		Closed system (minima	al contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhal	ation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to person	al prot	ection, hygiene and healt	th evaluation	
 Dermal Protection 		No [Effectiveness Derm	nal: 0%]	
 Respiratory Protection 		No [Effectiveness Inhal	ation: 0%]	
Other conditions affecting workers exposure	е			
 Place of use 		Indoors		
 Process temperature (for solid) 		Ambient (default)		
Skin surface potentially exposed		One hand face only (24	10 cm2)	
3.4.2 Exposure concentrations and risk	s for v	workers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.07	mg/m ³ (TRA Worker)	RCR = 1	
Inhalation, systemic, acute	0.28	mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.07	mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.28	mg/m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.69 mg/m³ (TRA Worker)		RCR = 0.69	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 1.69	
3.5 Worker contributing scenario 4: Use in batch and other process (synthesis) where opportunity for exposure arises (PROC 4)				
3.5.1 Conditions of use (TRA Worker)				
Product characteristics				
o Physical state		Solid		
 Dustiness of material 	o Dustiness of material		Low	
Concentration of substance mixture		Substance as such (100%)		
Amount used, frequency and duration of use/exposure				

Duration of activity					
Other relevant operational conditions General ventilation General ventilation Closed system (minimal contact during routine operations) No [Effectiveness Inhalation: 0%] Advanced Conditions and measures related to personal protection, hygiene and health evaluation Dermal Protection No [Effectiveness Dermal: 0%] No [Effectiveness Dermal: 0%] No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure Place of use Process temperature (for solid) Ambient (default) Skin surface potentially exposed Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term O.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, local, long-term O.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term O.274 mg/m³ (TRA Worker) Dermal, systemic, long-term O.274 mg/m³ (TRA Worker) Qualitative Combined routes, systemic, long-term O.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, acute Combined routes, systemic, long-term O.274 mg/m³ (TRA Worker) RCR = 0.446 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Dustiness of material Low Concentration of substance mixture Substance as such (100%) Ambient (default) Ambient (default) Ambient (default) Ambient (default) No [Effectiveness Inhalation: 0%] Risk characteristics Qualitative Qualitative Qualitative Dustiness of material Low Concentration of substance mixture Substance as such (100%) Ambient (default) Ambient (default) Risk charact					
General ventilation Basic general ventilation (1-3 air changes per hour) Containment Closed system (minimal contact during routine operations) Local exhaust ventilation No [Effectiveness Inhalation: 0%] Cocupational Health and Safety Management System Advanced Conditions and measures related to personal protection, hygiene and health evaluation Dermal Protection No [Effectiveness Dermal: 0%] Respiratory Protection No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure Place of use Indoors Process temperature (for solid) Ambient (default) Skin surface potentially exposed Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Risk characterisation Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, systemic, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.274 mg/m³ (TRA Worker) Qualitative Combined routes, systemic, long-term 0.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, acute Qualitative Qualitative Combined routes, systemic, long-term 0.274 mg/m³ (TRA Worker) RCR = 0.446 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Qualitative Substance as such (100%) Amount used, frequency and duration of use/exposure Quarion of activity As hours Technical and organizational conditions and measures Other relevant operational conditions and measures Other relevant operational conditions General ventilation (1-3 air changes per hour)	Technical and organizational conditions and	d meas	sures		
Containment Closed system (minimal contact during routine operations) Local exhaust ventilation No [Effectiveness Inhalation: 0%] Advanced Conditions and measures related to personal protection, hygiene and health evaluation Dermal Protection No [Effectiveness Dermal: 0%] Respiratory Protection No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure Place of use Place of use Process temperature (for solid) Skin surface potentially exposed Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term O.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, local, long-term O.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute O.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute O.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, coute O.274 mg/m³ (TRA Worker) Qualitative Combined routes, systemic, long-term O.274 mg/m³ (TRA Worker) Product characteristics Propical candidate (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Dustiness of material Low Concentration of substance mixture Amount used, frequency and duration of use/exposure Duration of activity As hours Technical and organizational conditions and measures Other relevant operationation conditions General ventilation Basic general ventilation (1-3 air changes per hour)	Other relevant operational conditions				
O Local exhaust ventilation No [Effectiveness Inhalation: 0%] O Occupational Health and Safety Management System Conditions and measures related to personal protection, hygiene and health evaluation O Dermal Protection No [Effectiveness Dermal: 0%] Respiratory Protection No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure ○ Place of use Indoors ○ Process temperature (for solid) Ambient (default) ○ Skin surface potentially exposed Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Risk characterisation Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, caute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, secure 0.274 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, acute Qualitative Combined routes, systemic, long-term 0.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, acute Qualitative Combined routes, systemic, long-term RCR = 0.846 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics ○ Physical state Solid ○ Dustiness of material Low ○ Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure ○ Duration of activity < 8 hours Technical and organizational conditions and measures Other relevant operational conditions General ventilation Basic general ventilation (1-3 air changes per hour)	o General ventilation		Basic general ventilation	n (1-3 air changes per hour)	
Occupational Health and Safety Management System Conditions and measures related to personal protection, hygiene and health evaluation Dermal Protection No [Effectiveness Dermal: 0%] Respiratory Protection No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure Place of use Indoors Process temperature (for solid) Ambient (default) Skin surface potentially exposed Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term O.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, local, long-term O.04 mg/m³ (TRA Worker) Oualitative Inhalation, local, caute O.8 mg/m³ (TRA Worker) Oualitative Oermal, systemic, long-term O.274 mg/m³ (TRA Worker) Oualitative Oermal, systemic, long-term O.274 mg/m³ (TRA Worker) Oualitative Combined routes, systemic, long-term O.274 mg/m³ (TRA Worker) Oualitative Combined routes, systemic, long-term O.274 mg/m³ (TRA Worker) Oualitative Combined routes, systemic, long-term O.274 mg/m³ (TRA Worker) Product characteristics Physical state Oustiness of material Oncentration of use(TRA Worker) Product characteristics Oustiness of material Occoncentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Ouration of activity Seneral ventilation Offer relevant operational conditions Offer relevant operational conditions Offer relevant operational conditions Offer relevant operational conditions	 Containment 		Closed system (minimal	contact during routine operations)	
Management System Conditions and measures related to personal protection, hygiene and health evaluation Dermal Protection No [Effectiveness Dermal: 0%] Respiratory Protection No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure Place of use Process temperature (for solid) Ambient (default) Skin surface potentially exposed Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term O.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, local, long-term O.04 mg/m³ (TRA Worker) Unalitative Inhalation, local, long-term O.274 mg/m³ (TRA Worker) Dermal, systemic, long-term O.274 mg/m³ (TRA Worker) Dermal, systemic, acute Combined routes, systemic, long-term RCR = 0.274 Dermal, systemic, acute Dermal, systemic, acute Combined routes, systemic, long-term Dermal systemic, long-term Scale Conditions of use(TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Scale active that sair changes per hour)	 Local exhaust ventilation 		No [Effectiveness Inhala	ation: 0%]	
Dermal Protection No [Effectiveness Dermal: 0%] Respiratory Protection No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure Place of use Indoors Process temperature (for solid) Ambient (default) Skin surface potentially exposed Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, systemic, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, acute Qualitative Dermal, systemic, acute Qualitative Combined routes, systemic, long-term RCR = 0.846 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity < 8 hours Technical and organizational conditions and measures Other relevant operational conditions Basic general ventilation (1-3 air changes per hour)	Management System				
ORespiratory Protection No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure Place of use Indoors Process temperature (for solid) Ambient (default) Skin surface potentially exposed Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, systemic, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, acute Qualitative Dermal, systemic, acute Qualitative Combined routes, systemic, long-term RCR = 0.274 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity < 8 hours Technical and organizational conditions and measures Other relevant operational conditions General ventilation Basic general ventilation (1-3 air changes per hour)	Conditions and measures related to person	al prot	ection, hygiene and health	n evaluation	
Other conditions affecting workers exposure Place of use Process temperature (for solid) Ambient (default) Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term Inhalation, local, long-term O.04 mg/m³ (TRA Worker) Inhalation, local, long-term O.04 mg/m³ (TRA Worker) Inhalation, local, acute O.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute O.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, seven O.274 mg/m³ (TRA Worker) Dermal, systemic, long-term O.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, long-term RCR = 0.846 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%) Basic general ventilation (1-3 air changes per hour)	 Dermal Protection 		No [Effectiveness Dermal: 0%]		
Place of use Indoors Process temperature (for solid) Ambient (default) Skin surface potentially exposed Two hands face (480 cm2) 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Risk characterisation Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, long-term 0.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, soute Qualitative Combined routes, systemic, long-term RCR = 0.846 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity < 8 hours Technical and organizational conditions and measures Other relevant operational conditions Basic general ventilation (1-3 air changes per hour)	o Respiratory Protection		No [Effectiveness Inhala	ation: 0%]	
o Process temperature (for solid) o Skin surface potentially exposed 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Risk characterisation	Other conditions affecting workers exposure	е			
o Skin surface potentially exposed 3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term Inhalation, systemic, acute Inhalation, local, long-term Inhalation, local, acute Inhalati	 Place of use 		Indoors		
3.5.2 Exposure concentrations and risks for workers Route of exposure and type of effects Route of exposure and type of effects Exposure concentration Risk characterisation ROCR = 0.571 Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.274 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.274 mg/m³ (TRA Worker) RCR = 0.274 Dermal, systemic, acute Combined routes, systemic, long-term RCR = 0.846 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Product characteristics Physical state Solid Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity < 8 hours Technical and organizational conditions and measures Other relevant operational conditions Basic general ventilation (1-3 air changes per hour)	 Process temperature (for solid) 		Ambient (default)		
Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, systemic, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Permal, systemic, long-term 0.274 mg/m³ (TRA Worker) Qualitative RCR = 0.274 Dermal, systemic, acute Qualitative Combined routes, systemic, long-term RCR = 0.846 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Solid Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity < 8 hours Technical and organizational conditions and measures Other relevant operational conditions Basic general ventilation (1-3 air changes per hour)	 Skin surface potentially exposed 		Two hands face (480 cm	12)	
Inhalation, systemic, long-term 1.	3.5.2 Exposure concentrations and risk	s for v	vorkers		
Inhalation, systemic, acute Inhalation, local, long-term Inhalation, local, long-term Inhalation, local, acute Inhalation, local, long-term Inhalation Inhalat	Route of exposure and type of effects Expo		sure concentration Risk characterisation		
Inhalation, local, long-term Inhalation, local, acute Inhalation Inhalative Inhalation Inhalation	Inhalation, systemic, long-term	0.04	mg/m³ (TRA Worker) RCR = 0.571		
Inhalation, local, acute Dermal, systemic, long-term Dermal, systemic, acute Combined routes, systemic, long-term RCR = 0.274 Dermal, systemic, acute Combined routes, systemic, long-term RCR = 0.846 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Physical state Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%) Technical and organizational conditions and measures Other relevant operational conditions General ventilation Basic general ventilation (1-3 air changes per hour)	Inhalation, systemic, acute 0.8 m		ng/m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term Dermal, systemic, acute Combined routes, systemic, long-term RCR = 0.846 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%) Technical and organizational conditions and measures Other relevant operational conditions General ventilation Basic general ventilation (1-3 air changes per hour)	Inhalation, local, long-term	0.04	mg/m³ (TRA Worker) Qualitative		
Dermal, systemic, acute Combined routes, systemic, long-term RCR = 0.846 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%) Amount used, frequency and duration of use/exposure Buration of activity Substance as such (100%) Amount used, frequency and duration of use/exposure Buration of activity Substance as such (100%) Amount used, frequency and duration of use/exposure Buration of activity Substance as such (100%) Amount used, frequency and duration of use/exposure Buration of activity Substance as such (100%) Amount used, frequency and duration of use/exposure Buration of activity Substance as such (100%) Amount used, frequency and duration of use/exposure Buration of activity Substance as such (100%) Amount used, frequency and duration of use/exposure Buration of activity Substance as such (100%)	Inhalation, local, acute	0.8 m	ng/m ³ (TRA Worker)	Qualitative	
Combined routes, systemic, long-term 3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%) Technical and organizational conditions and measures Other relevant operational conditions General ventilation Basic general ventilation (1-3 air changes per hour)	Dermal, systemic, long-term	0.274	1 mg/m³ (TRA Worker)	RCR = 0.274	
3.6 Worker contributing scenario 5: Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%) Technical and organizational conditions and measures Other relevant operational conditions General ventilation Basic general ventilation (1-3 air changes per hour)	Dermal, systemic, acute			Qualitative	
preparations and articles (multi-stage and/or significant contact) (PROC 5) 3.6.1 Conditions of use(TRA Worker) Product characteristics Physical state Solid Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Se hours Technical and organizational conditions and measures Other relevant operational conditions General ventilation Basic general ventilation (1-3 air changes per hour)	Combined routes, systemic, long-term			RCR = 0.846	
Product characteristics Physical state Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%) Amount used, frequency and duration of use/exposure Buration of activity Substance as such (100%) Substance as such (100%) Substance as such (100%) Buration of use/exposure Substance as such (100%) Substance as such (100%) Busic general ventilation (1-3 air changes per hour)					
o Physical state Solid o Dustiness of material Low o Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure o Duration of activity < 8 hours Technical and organizational conditions and measures Other relevant operational conditions o General ventilation Basic general ventilation (1-3 air changes per hour)	3.6.1 Conditions of use(TRA Worker)				
o Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Technical and organizational conditions and measures Other relevant operational conditions General ventilation Basic general ventilation (1-3 air changes per hour)	Product characteristics				
 ○ Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure ○ Duration of activity Technical and organizational conditions and measures Other relevant operational conditions ○ General ventilation Basic general ventilation (1-3 air changes per hour) 	o Physical state		Solid		
Amount used, frequency and duration of use/exposure o Duration of activity < 8 hours Technical and organizational conditions and measures Other relevant operational conditions o General ventilation Basic general ventilation (1-3 air changes per hour)					
o Duration of activity < 8 hours Technical and organizational conditions and measures Other relevant operational conditions o General ventilation Basic general ventilation (1-3 air changes per hour)	-				
Technical and organizational conditions and measures Other relevant operational conditions o General ventilation Basic general ventilation (1-3 air changes per hour)		e/expo	T		
Other relevant operational conditions o General ventilation Basic general ventilation (1-3 air changes per hour)	-				
o General ventilation Basic general ventilation (1-3 air changes per hour)	*	umeas	sures		
	·				
o Containment Closed system (minimal contact during routine operations)	General ventilation				
	o Containment		Closed system (minimal contact during routine operations)		

Occupational Health and Safety Management System Conditions and measures related to personal protection, hygiene and health evaluation ○ Dermal Protection ○ Respiratory Protection ○ No [Effectiveness Dermal: 0%] ○ Respiratory Protection ○ No [Effectiveness Inhalation: 0%] ○ Respiratory Protection ○ No [Effectiveness Inhalation: 0%] ○ Respiratory Protection ○ Place of use ○ Process temperature ○ Process temperature ○ Skin surface potentially exposed ○ Skin surface potentially exposed 3.6.2 Exposure concentrations and risks for workers Route of exposure and type of effects □ Exposure concentration Inhalation, systemic, long-term □ 0.04 mg/m³ (TRA Worker) Inhalation, systemic, acute □ 0.8 mg/m³ (TRA Worker) □ 0.04 mg/m³ (TRA Worker) □ 0.0548 mg/m³ (TRA Worker) □ 0.0648 mg/m³ (TRA Worker) □ 0.074 mg/m³ (TRA Worker) □ 0.075 mg/m³ (TRA Worker) □ 0.076 mg/m³ (TRA Worker) □ 0.076 mg/m³ (TRA Worker) □ 0.077 mg/m³ (TRA Worker) □ 0.077 mg/m³ (TRA Worker) □ 0.077 mg/m³ (TRA Worker) □ 0.078 mg/m³ (TRA Worker) □ 0.088 mg/m³ (TRA Worker) □ 0.088 mg/m³ (TRA Worker) □ 0.088 mg/m³ (TRA Worker) □ 0.098 mg/m³ (TR				
Management System	Local exhaust ventilation No [Effectiveness Inhalation: 0%]	
Conditions and measures related to personal protection, hygiene and health evaluation Dermal Protection No [Effectiveness Dermal: 0%] No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure Place of use Indoors No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure Place of use Indoors Ambient (as solid) Skin surface potentially exposed Two hands face (480 cm2) 3.6.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Risk characterisation Inhalation, systemic, long-term O.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, systemic, acute O.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term O.94 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term O.548 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term O.548 mg/m³ (TRA Worker) RCR = 0.548 Dermal, systemic, long-term O.548 mg/m³ (TRA Worker) RCR = 0.548 Dermal, systemic, long-term O.548 mg/m³ (TRA Worker) RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%)			anced	
o Respiratory Protection No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure ○ Place of use Indoors ○ Process temperature Ambient (as solid) ○ Skin surface potentially exposed Two hands face (480 cm2) 3.6.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Risk characterisation Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, systemic, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.548 mg/m³ (TRA Worker) RCR = 0.548 Dermal, systemic, long-term 0.548 mg/m³ (TRA Worker) RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics ○ Physical state Solid ○ Dustiness of material Low ○ Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure ○ Duration of activity < 8 hours Technical and organizational conditions and measures	Conditions and measures related to personal	protection,		
o Respiratory Protection No [Effectiveness Inhalation: 0%] Other conditions affecting workers exposure ○ Place of use Indoors ○ Process temperature Ambient (as solid) ○ Skin surface potentially exposed Two hands face (480 cm2) 3.6.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Risk characterisation Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, systemic, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.548 mg/m³ (TRA Worker) RCR = 0.548 Dermal, systemic, long-term 0.548 mg/m³ (TRA Worker) RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics ○ Physical state Solid ○ Dustiness of material Low ○ Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure ○ Duration of activity < 8 hours Technical and organizational conditions and measures	o Dermal Protection	No IF	- -ffectiveness Derma	al: 0%1
Other conditions affecting workers exposure Place of use Process temperature Skin surface potentially exposed New posure concentrations and risks for workers Route of exposure and type of effects Route of exposure and type of effects Route of exposure and type of effects Route of exposure i, long-term O.04 mg/m³ (TRA Worker) Inhalation, systemic, long-term O.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term O.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute O.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term O.548 mg/m³ (TRA Worker) Dermal, systemic, acute Combined routes, systemic, long-term RCR = 0.548 Dermal, systemic, acute Qualitative Combined routes, systemic, long-term RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%)	Respiratory Protection			•
o Place of use	Other conditions affecting workers exposure			
o Skin surface potentially exposed 3.6.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term O.04 mg/m³ (TRA Worker) Inhalation, systemic, acute Inhalation, local, long-term O.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute O.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute O.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term O.548 mg/m³ (TRA Worker) Qualitative Dermal, systemic, acute Qualitative Combined routes, systemic, long-term RCR = 0.548 Dermal, systemic, acute Combined routes, systemic, long-term RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity < 8 hours Technical and organizational conditions and measures	-	Indoo	ors	
3.6.2 Exposure concentrations and risks for workers Route of exposure and type of effects Exposure concentration Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) Inhalation, systemic, acute Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.548 mg/m³ (TRA Worker) Qualitative Qualitative Combined routes, systemic, long-term RCR = 0.548 Dermal, systemic, acute Qualitative Combined routes, systemic, long-term RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%)	o Process temperature	Ambi		
Route of exposure and type of effects Exposure concentration Risk characterisation	Skin surface potentially exposed	Two	hands face (480 cm	n2)
Inhalation, systemic, long-term 0.04 mg/m³ (TRA Worker) RCR = 0.571 Inhalation, systemic, acute 0.8 mg/m³ (TRA Worker) Qualitative Inhalation, local, long-term 0.04 mg/m³ (TRA Worker) Qualitative Inhalation, local, acute 0.8 mg/m³ (TRA Worker) Qualitative Dermal, systemic, long-term 0.548 mg/m³ (TRA Worker) RCR = 0.548 Dermal, systemic, acute Qualitative Combined routes, systemic, long-term RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity < 8 hours Technical and organizational conditions and measures	3.6.2 Exposure concentrations and risks	for worker	's	
Inhalation, systemic, acute Inhalation, local, long-term Inhalation, local, acute Inhalation, local, long-term Inhalation, local, exception, Inhalation Inhalation, local, long-term	Route of exposure and type of effects	Exposure	concentration	Risk characterisation
Inhalation, local, long-term Inhalation, local, acute Inhalation Inhalation, local, acute Inhalation Inhalation	Inhalation, systemic, long-term	0.04 mg/r	n ³ (TRA Worker)	RCR = 0.571
Inhalation, local, acute Dermal, systemic, long-term O.548 mg/m³ (TRA Worker) Dermal, systemic, acute Combined routes, systemic, long-term RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as hours Technical and organizational conditions and measures	Inhalation, systemic, acute	0.8 mg/m	³ (TRA Worker)	Qualitative
Dermal, systemic, long-term Dermal, systemic, acute Combined routes, systemic, long-term RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Verification (Charging/discharging) RCR = 0.548 RCR = 1.12 3.7 Worker on the substance or preparation (charging/discharging) RCR = 1.12 3.7 Worker on the substance or preparation (charging/discharging) RCR = 1.12 Substance as such (100%)	Inhalation, local, long-term	0.04 mg/r	n ³ (TRA Worker)	Qualitative
Dermal, systemic, acute Combined routes, systemic, long-term RCR = 1.12 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%)	Inhalation, local, acute	0.8 mg/m	³ (TRA Worker)	Qualitative
Combined routes, systemic, long-term 3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Solid Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%)	Dermal, systemic, long-term	0.548 mg/	/m ³ (TRA Worker)	RCR = 0.548
3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Solid Dustiness of material Low Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Substance as such (100%) **Technical and organizational conditions and measures**	Dermal, systemic, acute			Qualitative
discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a) 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Solid Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Technical and organizational conditions and measures	Combined routes, systemic, long-term			RCR = 1.12
Product characteristics Physical state Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Technical and organizational conditions and measures				
 Physical state Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Technical and organizational conditions and measures 				,
 Dustiness of material Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Technical and organizational conditions and measures 	, ,			
 Concentration of substance mixture Substance as such (100%) Amount used, frequency and duration of use/exposure Duration of activity Technical and organizational conditions and measures 	o Physical state		Solid	
Amount used, frequency and duration of use/exposure o Duration of activity < 8 hours Technical and organizational conditions and measures	*		Low	
 Duration of activity Technical and organizational conditions and measures 			Substance as such (100%)	
Technical and organizational conditions and measures	Amount used, frequency and duration of use/	/exposure		
	 Duration of activity 		< 8 hours	
Other relevant operational conditions	Technical and organizational conditions and measures			
	Other relevant operational conditions			
o General ventilation Basic general ventilation (1-3 air changes per hour)	o General ventilation		Basic general ventilation (1-3 air changes per hour)	
 Containment Closed system (minimal contact during routine operations) 	 Containment 			
Local exhaust ventilation	Local exhaust ventilation		No [Effectiveness Inhalation: 0%]	
Occupational Health and Safety Management System Advanced			Advanced	
Conditions and measures related to personal protection, hygiene and health evaluation				

o Dermal Protection		No [Effectiveness	s Dermal: 0%]	
o Respiratory Protection		No [Effectiveness	No [Effectiveness Inhalation: 0%]	
Other conditions affecting workers exposure				
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default))	
 Skin surface potentially exposed 		Two hands (960	cm2)	
3.7.2 Exposure concentrations and risk	s for wo	rkers		
Route of exposure and type of effects	Exposu	ure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.02 mg	g/m³ (TRA Worker)	RCR = 0.286	
Inhalation, systemic, acute	0.4 mg/	/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.02 mg	g/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.4 mg/	/m³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.548 m	ng/m³ (TRA Worker)	RCR = 0.548	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.834	
3.8 Worker contributing scenario 7: Transfer of substance or preparation (charging discharging) from/to vessels/large containers at dedicated facilities (PROC 8b) 3.8.1 Conditions of use (TRA Worker)				
Product characteristics				
 Physical state 	S	Solid		
o Dustiness of material		_OW		
Concentration of substance mixtu		Substance as such (100	0%)	
Amount used, frequency and duration of use/expos o Duration of activity		< 8 hours		
Technical and organizational conditions and measu				
Other relevant operational conditions				
General ventilation		Basic general ventilation (1-3 air changes per hour)		
o Containment		Closed system (minimal contact during routine operations)		
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal protection, hygiene and health evaluation				
o Dermal Protection		No [Effectiveness Dermal: 0%]		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure				
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		

o Skin surface potentially exposed Two hands (960 cm		Two hands (960 cm2)		
3.8.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.02	mg/m ³ (TRA Worker)	RCR = 0.286	
Inhalation, systemic, acute	0.4 m	ng/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.02	mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.4 m	ng/m³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.548	3 mg/m³ (TRA Worker)	RCR = 0.548	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.834	
3.9 Worker contributing scenario 8: (dedicated filling line, including weight			eparation into small containers	
3.9.1 Conditions of use (TRA Worker)				
Product characteristics				
o Physical state		Solid		
Dustiness of material		Low	2/2	
Concentration of substance mixtur		Substance as such (100%)		
Amount used, frequency and duration of use/expos				
		< 8 hours		
Technical and organizational conditions and meas		sures		
Other relevant operational conditions				
o General ventilation		Basic general ventilation	n (1-3 air changes per hour)	
o Containment		Closed system (minimal	contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhala	ition: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal prote		ection, hygiene and health	n evaluation	
 Dermal Protection 	No [Effectiveness Derma		al: 0%]	
Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure				
o Place of use Ind		Indoors		
o Process temperature (for solid)		Ambient (default)		
o Skin surface potentially exposed Two hand		Two hands face (480 cm	o hands face (480 cm2)	
3.9.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.06	mg/m³ (TRA Worker)	RCR = 0.857	
Inhalation, systemic, acute 0.4 mg/m³ (TRA Worker)		Qualitative		

Inhalation, local, long-term	0.06 mg/m ³	(TRA Worker)	Qualitative	
Inhalation, local, acute	0.4 mg/m³ (TRA Worker)		Qualitative	
Dermal, systemic, long-term	0.823 mg/m	n ³ (TRA Worker)	RCR = 0.823	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.1.68	
3.10 Worker contributing scenario 9			s or articles by tabletting,	
3.10.1 Conditions of use	1 (PROC 14)) 		
Product characteristics		O-1:-I		
Physical state		Solid		
Dustiness of material		Low		
Concentration of substance mixtur		Substance as suc	n (100%)	
Amount used, frequency and duration of us	e/exposure			
Duration of activity		< 8 hours		
Technical and organizational conditions and	d measures			
Other relevant operational conditions				
o General ventilation		Basic general ventilation (1-3 air changes per hour)		
o Containment		Closed system (m operations)	•	
Local exhaust ventilation		No [Effectiveness	Inhalation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal protection, hygiene and health evaluation				
o Dermal Protection		No [Effectiveness	No [Effectiveness Dermal: 0%]	
Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure	е			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
Skin surface potentially exposed		Two hands face (480 cm2)		
3.10.2 Exposure concentrations and ris	ers			
Route of exposure and type of effects Exposure		concentration	Risk characterisation	
Inhalation, systemic, long-term	0.04 mg/n	n ³ (TRA Worker)	RCR = 0.571	
		³ (TRA Worker)	Qualitative	
· • • · • · • · · · · · · · · · · · · ·		m ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.8 mg/m	³ (TRA Worker)	Qualitative	
		/m³ (TRA Worker)	RCR = 0.137	

Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.709	
3.11 Worker contributing scenario 10	boratory agent (PROC 15)		
3.11.1 Conditions of use (TRA Worker))			
Product characteristics				
 Physical state 		Solid		
 Dustiness of material 		Low		
 Concentration of substance mixtur 	·e	Substance as suc	ch (100%)	
Amount used, frequency and duration of us	e/exposure			
 Duration of activity 		< 8 hours		
Technical and organizational conditions and	d measures			
Other relevant operational conditions				
General ventilation		Basic general ver	ntilation (1-3 air changes per hour)	
o Containment		Closed system (m operations)	Closed system (minimal contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness	[Effectiveness Inhalation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal protection, hygiene and health evaluation				
Dermal Protection		No [Effectiveness	Dermal: 0%]	
Respiratory Protection	Respiratory Protection		Inhalation: 0%]	
Other conditions affecting workers exposure	e			
o Place of use		Indoors	idoors	
Process temperature (for solid)		Ambient (default)	Ambient (default)	
Skin surface potentially exposed		One hand face or	ıly (240 cm2)	
3.10.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	e of exposure and type of effects		Risk characterisation	
Inhalation, systemic, long-term	0.07 mg/m³ (TRA Worker)		RCR = 1	
Inhalation, systemic, acute	0.28 mg/m ³	(TRA Worker)	Qualitative	
Inhalation, local, long-term 0.07 mg/m³		(TRA Worker)	Qualitative	
Inhalation, local, acute 0.28 mg/m³		(TRA Worker)	Qualitative	
Dermal, systemic, long-term 0.34 mg/m³		(TRA Worker)	RCR = 0.34	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 1.34	

4. Risk Management Measures (RMM)			
4.1 RMMs related to workers			
	Workers in the identified process/areas should be trained (a) to avoid work without protection and (b) to understand the respiratory effects of potassium iodide and (c) to follow the safer procedures instructed by the employer		
Organisational measures	General occupational hygiene measures are required to ensure safe handling of the substance. Good occupational hygiene practices have to be followed (e.g. shower and change clothes at end of work shift) to avoid any contamination of private households via the work-home-interface.		
	Avoid inhalation or ingestion. Do not eat and smoke in the workplace. Unless otherwise stated below, wear standard working clothes and shoes. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.		
	Regular training in workplace hygiene practice and proper use of personal protective equipment is required.		
Technical measures	Use closed systems and covering open containers to avoid potential splashes Store in cool, dry clean, well ventilated areas, away from oxidizer materials. Do not store under direct sun light		
4.2 RMMs related to the environment			
Organisational measures	Procedural and/or control technologies are required to minimize emissions and the resulting exposure during cleaning and maintenance procedures.		
Abatement measures related with wastewater	Potassium iodide wastewater should be reused or iodine in them recovered.		
Abatement measures waste air and solid waste	Due to is negligible vapour pressure potassium iodide is not expected to be found in the solid waste nor to reach the air		
4.3 Waste related measures			
o Type of waste	Packaging materials		
o Disposal technique	The containers and packaging materials should be disposed in accordance with local requirements.		
5. Prediction of exposure resulting from the conditions described above and the substance properties.			
5.1 Human exposure			
Inhalation Systemic effects - Long-ter	m DNEL (Dose dérivée sans effet): 0.035 mg/m³		
Inhalation Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).		
Inhalation Local effects - Long-term	Risque inconnu (aucune autre information nécéssaire).		
Inhalation Local effects - Acute	Aucun risque identifié.		

Oral Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Oral Systemic effects - Acute	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Dermal Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 1 mg/kg bw/day
Dermal Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Dermal Local effects - Long-term	Aucun risque identifié.
Dermal Local effects - Acute	Aucun risque identifié.
Eyes Local effects	Aucun risque identifié.

5.2 Environmental exposure

5.2.1 Aquatic compartment (including sediment) - ECOSAR v.1.00 program operated by EPA

Organism	Duration	End Point	Result (mg/L)
Fish	96-hr	LC50	6736.780
Fish	14-day	LC50	6600.207
Daphnid	48-hr	LC50	2844.798
Green Algae	96-hr	EC50	577.397
Fish	30-day	CHV	615.632
Daphnid	-	CHV	241.908
Green Algae	-	CHV	159.232
Fish ((SW)	-	CHV	10867.097
Mysid Shrimp	96-hr	LC50	27123.457
Fish ((SW)	-	CHV	318.739
Mysid Shrimp (SW)	-	CHV	4186.333
Earthworm	14-day	LC50	460.463

5.2.2 Terrestrial compartment

The direct release to soil can be excluded for the exposure scenario. For indirect exposure to soil, firstly the low vapour pressure and high water solubility can prove that little iodide will distribute in air, which means no potassium iodide will be deposited from air.

Secondly, the adsorption to sludge can be excluded due to high water solubility and low adsorption potential; thus the indirect exposure to soil on sludge application can be ruled out. In conclusion, the exposure to soil is unlikely.

6. PBT and vPvB assessment

PBT assessment does not apply.

According to REACH regulation 1907/2006 Annex XIII PBT/vPvB assessment does not apply for inorganic substances.

1. Short title of scenario 5		
Manufacture or synthesis of fine chemica	als and pharmaceuticals	
2. Description and processes covered	in the exposure scenario	
	SU 3: Uses of substances as such or in preparations at industrial sites	
Sector of use (SU)	SU 9: Manufacture of fine chemicals	
	SU 10: Formulation [mixing] of preparations and/or repackaging (excluding alloys)	
Product category (PC)	PC19, PC20, PC21	
Process category (PROC)	PC19, PC20, PC21 PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent	
Article category (AC)	Not applicable	
Environmental release category (ERC)	ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates)	
3. Exposure scenario 1 : Manufacture or synthesis of fine chemicals and pharmaceuticals		
3.1 Environmental contributing scenario 1	:	
Conditions of use	Not defined	

Releases Not defined

Exposure risks for the environment and man via environment:

- Potassium iodide is very stable under ordinary conditions of use and storage. The phototransformation in air is irrelevant to potassium iodide, because few potassium iodide can be distributed in air for the low vapour pressure and high water solubility
- Hydrolysis is not a concern to such inorganic substance which can be completely ionized in water phase. Potassium iodide will completely dissociate in water giving potassium ion and iodide anion
- The potassium iodide is readily absorbed by organisms as K+ and I-, which are both small (an)ions and well known not likely to be bioaccumulated

Based on the intrinsic prosperities of potassium iodide, the substance can be expected to have a low potential for adsorption (completely ionized to small ions in water phase). The potassium ion and iodide anion are uniformly distributed in water phase. In the air, these two basic (an)ions is negligible, due to high water solubility and low vapour pressure. To sediment and soil phases, these two (an)ions are mostly distributed in the pore water.

3.2 Worker contributing scenario 1: Use in closed process, no likelihood of exposure (PROC 1)

3.2.1 Conditions of use (TRA Worker)				
Product characteristics				
 Physical state 	Solid			
 Dustiness of material 	Low			
 Concentration of substance mixture 	Substance as such (100%)			
Amount used, frequency and duration of use	/exposure			
o Duration of activity	< 8 hours			
Technical and organizational conditions and measure	sures			
Other relevant operational conditions				
o General ventilation	Basic general ventilation (1-3 air changes per hour)			
o Containment	Closed system (minimal contact during routine operations)			
Local exhaust ventilation	No [Effectiveness Inhalation: 0%]			
Occupational Health and Safety Management System Advanced				
Conditions and measures related to personal protection, hygiene and health evaluation				
o Dermal Protection	No [Effectiveness Dermal: 0%]			
Respiratory Protection	No [Effectiveness Inhalation: 0%]			
Other conditions affecting workers exposure				
o Place of use	Indoors			
o Process temperature (for solid)	Ambient (default)			
Skin surface potentially exposed	One hand face only (240 cm2)			
3.2.2 Exposure concentrations and risks for	workers			

3.2.2 Exposure concentrations and risks for workers

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.01 mg/m³ (TRA Worker)	RCR = 0.143
Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)	Qualitative

0.01	ma/m³ (TDA \Markar)	Qualitative		
		Qualitative		
0.034 mg/m³ (TRA Worker)		RCR = 0.034		
		Qualitative		
		RCR = 0.177		
Use in OC 2)	closed process, cont	inuous process with		
	Solid			
	Low			
e	,	%)		
e/expo	sure			
	< 8 hours			
d meas	ures			
	Basic general ventilation	n (1-3 air changes per hour)		
	Closed system (minimal contact during routine operations)			
 Local exhaust ventilation 		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced		
al prote	ection, hygiene and health	evaluation		
o Dermal Protection		No [Effectiveness Dermal: 0%]		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]		
е				
Place of use		Indoors		
Ambient (default)				
		:m2)		
s for v	vorkers			
Exposure concentration		Risk characterisation		
0.006 mg/m³ (TRA Worker)		RCR = 0.086		
0.04 mg/m³ (TRA Worker)		Qualitative		
0.006	mg/m³ (TRA Worker)	Qualitative		
0.04	mg/m ³ (TRA Worker)	Qualitative		
0.822 mg/m³ (TRA Worker)		RCR = 0.822		
	0.04 0.034 Jse in DC 2) e e/expo s for v Expo 0.006 0.04 0.006 0.04	Solid Low e Substance as such (100 e/exposure < 8 hours I measures Basic general ventilation Closed system (minimal No [Effectiveness Inhala Advanced al protection, hygiene and health No [Effectiveness Derma No [Effectiveness Inhala Roors Ambient (default) Two hands face (480 cm s for workers Exposure concentration 0.006 mg/m³ (TRA Worker) 0.04 mg/m³ (TRA Worker) 0.04 mg/m³ (TRA Worker)		

Qualitative

RCR = 0.908

Dermal, systemic, acute

Combined routes, systemic, long-term

3.4 Worker contributing scenario 3: (PROC 3)	Use ir	n closed batch proces	ss (synthesis or formulation)		
3.4.1 Conditions of use (TRA Worker)					
Product characteristics					
o Physical state		Solid			
 Dustiness of material 		Low			
Concentration of substance mixtu		Substance as such (10	0%)		
Amount used, frequency and duration of us	se/expo				
Duration of activity		< 8 hours			
Technical and organizational conditions an	id meas	sures			
Other relevant operational conditions					
o General ventilation			n (1-3 air changes per hour)		
 Containment 		Closed system (minima	l contact during routine operations)		
 Local exhaust ventilation 		No [Effectiveness Inhal	ation: 0%]		
 Occupational Health and Safety Management System 		Advanced			
Conditions and measures related to persor	nal prote	ection, hygiene and healt	h evaluation		
o Dermal Protection		No [Effectiveness Derm	nal: 0%]		
Respiratory Protection		No [Effectiveness Inhalation: 0%]			
Other conditions affecting workers exposur	re				
o Place of use		Indoors			
o Process temperature (for solid)		Ambient (default)			
 Skin surface potentially exposed 		One hand face only (240 cm2)			
3.4.2 Exposure concentrations and ris	ks for v	vorkers			
Route of exposure and type of effects	Exposure concentration		Risk characterisation		
Inhalation, systemic, long-term	0.07	mg/m ³ (TRA Worker)	RCR = 1		
Inhalation, systemic, acute	0.28	mg/m³ (TRA Worker)	Qualitative		
Inhalation, local, long-term	0.07	mg/m ³ (TRA Worker)	Qualitative		
Inhalation, local, acute	0.28	mg/m³ (TRA Worker)	Qualitative		
Dermal, systemic, long-term	0.69	mg/m ³ (TRA Worker)	RCR = 0.69		
Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long-term			RCR = 1.69		
3.5 Worker contributing scenario 4: opportunity for exposure arises (PR		batch and other pro	cess (synthesis) where		
3.5.1 Conditions of use (TRA Worker)					
Product characteristics					
o Physical state		Solid			
 Dustiness of material 		Low			
 Concentration of substance mixtu 	re	Substance as such (100%)			

Amount used, frequency and duration of us	se/expc	sure			
o Duration of activity		< 8 hours			
Technical and organizational conditions and	d meas	sures			
Other relevant operational conditions					
o General ventilation		Basic general ventilation (1-3 air changes per hour)			
o Containment		Closed system (minimal contact during routine operations)			
Local exhaust ventilation		No [Effectiveness Inhala	ation: 0%]		
 Occupational Health and Safety Management System 		Advanced			
Conditions and measures related to person	al prot	ection, hygiene and health	n evaluation		
o Dermal Protection		No [Effectiveness Derm.	al: 0%]		
 Respiratory Protection 		No [Effectiveness Inhala	ation: 0%]		
Other conditions affecting workers exposur	е				
o Place of use		Indoors			
o Process temperature (for solid)		Ambient (default)			
 Skin surface potentially exposed 		Two hands face (480 cm2)			
3.5.2 Exposure concentrations and risk	s for v	workers			
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation		
Inhalation, systemic, long-term	0.05	mg/m ³ (TRA Worker)	RCR = 0.714		
Inhalation, systemic, acute	nalation, systemic, acute 0.2 n		Qualitative		
nhalation, local, long-term 0.05		mg/m ³ (TRA Worker)	Qualitative		
Inhalation, local, acute	0.2 m	ng/m³ (TRA Worker)	Qualitative		
Dermal, systemic, long-term	0.686	6 mg/m³ (TRA Worker)	RCR = 0.686		
Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long-term			RCR = 1.4		
3.6 Worker contributing scenario 5: preparations and articles (multi-stage					
3.6.1 Conditions of use(TRA Worker)					
Product characteristics					
 Physical state 	 Physical state 		Solid		
Dustiness of material			Low (4000)		
Concentration of substance mixtur		Substance as such (100%)			
Amount used, frequency and duration of us	se/expc				
Duration of activity Technical and argonizational conditions on	d mass	< 8 hours			
Technical and organizational conditions and	u meas	sures			
Other relevant operational conditions					
 General ventilation 		Basic general ventilation (1-3 air changes per hour)			

O = mt = imm = mt					
 Containment 	o Containment Clos		sed system (minimal contact during routine operations)		
		lo [Effectiveness Inhalation: 0%]			
Management System		Advanced			
Conditions and measures related to personal	l protect	ion, hygiene and health	evaluation		
o Dermal Protection No		No [Effectiveness Dermal: 0%]			
o Respiratory Protection No [lo [Effectiveness Inhala	tion: 0%]		
Other conditions affecting workers exposure					
o Place of use Ir		ndoors			
Process temperature		ambient (as solid)			
 Skin surface potentially exposed 		wo hands face (480 cm	2)		
3.6.2 Exposure concentrations and risks	for wor	rkers			
Route of exposure and type of effects	Expos	sure concentration	Risk characterisation		
Inhalation, systemic, long-term	0.03 m	ng/m³ (TRA Worker)	RCR = 0.857		
Inhalation, systemic, acute	0.2 mg	g/m³ (TRA Worker)	Qualitative		
Inhalation, local, long-term	0.03 m	ng/m³ (TRA Worker)	Qualitative		
Inhalation, local, acute	0.2 mg	g/m³ (TRA Worker)	Qualitative		
Dermal, systemic, long-term	0.823	mg/m³ (TRA Worker)	RCR = 0.823		
Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long-term			RCR = 1.251		
James Tourse, Gratallino, long tolli					
3.7 Worker contributing scenario 6: To discharging) from/to vessels/large contributions					
3.7 Worker contributing scenario 6: To discharging) from/to vessels/large co					
3.7 Worker contributing scenario 6: To discharging) from/to vessels/large con 3.7.1 Conditions of use (TRA Worker)					
3.7 Worker contributing scenario 6: To discharging) from/to vessels/large colors. 3.7.1 Conditions of use (TRA Worker)					
3.7 Worker contributing scenario 6: Todischarging) from/to vessels/large colors. 3.7.1 Conditions of use (TRA Worker) Product characteristics		rs at non-dedicated			
3.7 Worker contributing scenario 6: Todischarging) from/to vessels/large conditions of use (TRA Worker) Product characteristics Ohysical state	ntainer	s at non-dedicated Solid	facilities (PROC 8a)		
3.7 Worker contributing scenario 6: Todischarging) from/to vessels/large colors. 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture	ntainer	Solid Low Substance as suc	facilities (PROC 8a)		
3.7 Worker contributing scenario 6: Todischarging) from/to vessels/large colors. 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture	ntainer	Solid Low Substance as suc	facilities (PROC 8a)		
3.7 Worker contributing scenario 6: Tidischarging) from/to vessels/large conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of user Duration of activity	/exposu	Solid Low Substance as sucre < 8 hours	facilities (PROC 8a)		
3.7 Worker contributing scenario 6: Todischarging) from/to vessels/large colors. 3.7.1 Conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of user Duration of activity Technical and organizational conditions and in	/exposu	Solid Low Substance as sucre < 8 hours	facilities (PROC 8a)		
3.7 Worker contributing scenario 6: Todischarging) from/to vessels/large conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of user	/exposu	Solid Low Substance as sucre < 8 hours	facilities (PROC 8a)		
3.7 Worker contributing scenario 6: Todischarging) from/to vessels/large collischarging) from/to vessels/large collischarging) from/to vessels/large collischarging) from/to vessels/large collischarging and see (TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of used Duration of activity Technical and organizational conditions and Other relevant operational conditions	/exposu	Solid Low Substance as sucre < 8 hours Basic general ven	h (100%)		
3.7 Worker contributing scenario 6: Todischarging) from/to vessels/large conditions of use (TRA Worker) Product characteristics Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of user Duration of activity Technical and organizational conditions and other relevant operational conditions General ventilation	/exposu	Solid Low Substance as success 4 8 hours Basic general ven Closed system (m	tilation (1-3 air changes per hour)		

Conditions and measures related to person protection, hygiene and health evaluation	al			
Dermal Protection		No [Effectiveness Dermal: 0%]		
Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure		110 [2.1004.101.00	a.a.a , o ₁	
Place of use		Indoors		
			1	
Process temperature (for solid) Skip surface potentially expected.		Ambient (default)		
Skin surface potentially exposed		Two hands (960	CITIZ)	
3.7.2 Exposure concentrations and risks for wo			Protection of the state of	
Route of exposure and type of effects	•	concentration	Risk characterisation	
Inhalation, systemic, long-term		m ³ (TRA Worker)	RCR = 0.429	
Inhalation, systemic, acute		³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.03 mg/r	n ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.2 mg/m	³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.823 mg	/m ³ (TRA Worker)	RCR = 0.823	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.251	
3.8 Worker contributing scenario 7: discharging) from/to vessels/large contributions				
3.8.1 Conditions of use (TRA Worker)				
Product characteristics				
o Physical state		lid		
Dustiness of material		Low Substance as such (100%)		
Concentration of substance mixture Amount used, frequency and duration of use/expe		Substance as such (100%)		
Amount used, frequency and duration of use/expo		< 8 hours		
Duration of activity Technical and organizational conditions and meas				
Other relevant operational conditions				
General ventilation		Basic general ventilation (1-3 air changes per hour)		
 Containment 	Clo	Closed system (minimal contact during routine operations)		
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to person	al protectio	n, hygiene and healt	h evaluation	
 Dermal Protection 	No	No [Effectiveness Dermal: 0%]		
o Respiratory Protection	No	No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure	e			
o Place of use		Indoors		

o Process temperature (for solid)	Ambient (default)			
 Skin surface potentially exposed 	Two hands (960 cm2)			
3.8.2 Exposure concentrations and risks for workers				
oute of exposure and type of effects			Risk characterisation	
Inhalation, systemic, long-term	0.005 mg/m³ (TRA Worker)		RCR = 0.071	
Inhalation, systemic, acute	0.02	mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.005	5 mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.02	mg/m³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.686	6 mg/m³ (TRA Worker)	RCR = 0.686	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.757	
3.9 Worker contributing scenario 8: (dedicated filling line, including weight			eparation into small containers	
3.9.1 Conditions of use (TRA Worker)				
Product characteristics				
 Physical state 		Solid		
 Dustiness of material 	Low			
 Concentration of substance mixture 		Substance as such (100)	%)	
Amount used, frequency and duration of use/exposure				
 Duration of activity 	< 8 hours			
Technical and organizational conditions and measures				
Other relevant operational conditions				
 General ventilation 	Basic general ventilation		n (1-3 air changes per hour)	
o Containment	Closed system (minimal		contact during routine operations)	
 Local exhaust ventilation 	No [Effectiveness Inhala		tion: 0%]	
 Occupational Health and Safety Management System 	Advanced			
Conditions and measures related to personal protection, hygiene and health evaluation				
 Dermal Protection 		No [Effectiveness Derma	al: 0%]	
 Respiratory Protection 		No [Effectiveness Inhala	tion: 0%]	
Other conditions affecting workers exposure				
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
 Skin surface potentially exposed 		Two hands face (480 cm	2)	
3.9.2 Exposure concentrations and risk	s for v	vorkers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.01 mg/m³ (TRA Worker) RCR = 0.143			

Inhalation, systemic, acute	0.04 mg/m ³	(TRA Worker)	Qualitative	
Inhalation, local, long-term	0.01 mg/m³ (TRA Worker)		Qualitative	
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)		Qualitative	
Dermal, systemic, long-term	0.686 mg/m³ (TRA Worker)		RCR = 0.686	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.829	
3.10 Worker contributing scenario 9: Production of preparations or articles by tabletting, compression, extrusion pelletisation (PROC 14)				
3.10.1 Conditions of use				
Product characteristics				
o Physical state		Solid		
o Dustiness of material		Low		
 Concentration of substance mixture 	e	Substance as suc	ch (100%)	
Amount used, frequency and duration of use	e/exposure			
o Duration of activity		< 8 hours		
Technical and organizational conditions and	l measures			
Other relevant operational conditions				
General ventilation		Basic general ventilation (1-3 air changes per hour)		
o Containment		Closed system (n operations)	ninimal contact during routine	
Local exhaust ventilation		No [Effectiveness	Inhalation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal protection, hygiene and health evaluation				
Dermal Protection		No [Effectiveness Dermal: 0%]		
Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure	;			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
o Skin surface potentially exposed		Two hands face (480 cm2)		
3.10.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	Exposure	concentration	Risk characterisation	
Inhalation, systemic, long-term	0.01 mg/n	n ³ (TRA Worker)	RCR = 0.143	
Inhalation, systemic, acute	0.04 mg/n	n ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.01 mg/m³ (TRA Worker)		Qualitative	
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)		Qualitative	

Dermal, systemic, long-term	0.343 mg/m ³ (TRA Worker)		RCR = 0.343	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.486	
3.11 Worker contributing scenario 1	0: Use as la	boratory agent (PROC 15)	
3.11.1 Conditions of use (TRA Worker)				
Product characteristics				
o Physical state		Solid		
Dustiness of material		Low		
Concentration of substance mixture	re	Substance as suc	th (100%)	
Amount used, frequency and duration of us	se/exposure			
 Duration of activity 		< 8 hours		
Technical and organizational conditions and	d measures			
Other relevant operational conditions				
o General ventilation		Basic general ven	eral ventilation (1-3 air changes per hour)	
 Containment 	 Containment 		Closed system (minimal contact during routine operations)	
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to personal				
protection, hygiene and health evaluation o Dermal Protection		No [Effectiveness Dermal: 0%]		
Respiratory Protection			No [Effectiveness Inhalation: 0%]	
Other conditions affecting workers exposure		140 [Elicotive liess	inidiation. 070j	
Place of use		Indoors		
Process temperature (for solid)		Ambient (default)		
Skin surface potentially exposed		One hand face only (240 cm2)		
3.10.2 Exposure concentrations and ris	sks for worke		., (2 10 51112)	
Route of exposure and type of effects		concentration	Risk characterisation	
Inhalation, systemic, long-term		(TRA Worker)	RCR = 1	
Inhalation, systemic, acute	_	(TRA Worker)	Qualitative	
Inhalation, local, long-term		(TRA Worker)	Qualitative	
Inhalation, local, acute		(TRA Worker)	Qualitative	
Dermal, systemic, long-term		(TRA Worker)	RCR = 0.34	
Dermal, systemic, acute		•	Qualitative	
· · · · · · · · · · · · · · · · · · ·				

4. Risk Management Measures (RMM)						
4.1 RMMs related to workers						
	Workers in the identified process/areas should be trained (a) to avoid work without protection and (b) to understand the respiratory effects of potassium iodide and (c) to follow the safer procedures instructed by the employer					
Organisational measures	General occupational hygiene measures are required to ensure safe handling of the substance. Good occupational hygiene practices have to be followed (e.g. shower and change clothes at end of work shift) to avoid any contamination of private households via the work-home-interface.					
	Avoid inhalation or ingestion. Do not eat and smoke in the workplace. Unless otherwise stated below, wear standard working clothes and shoes. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.					
	Regular training in workplace hygiene practice and proper use of personal protective equipment is required.					
	Use closed systems and covering open containers to avoid potential splashes					
Technical measures	Store in cool, dry clean, well ventilated areas, away from oxidizer materials.					
	Do not store under direct sun light					
4.2 RMMs related to the environment						
Organisational measures	Procedural and/or control technologies are required to minimize emissions and the resulting exposure during cleaning and maintenance procedures.					
Abatement measures related with wastewater	Potassium iodide wastewater should be reused or iodine in them recovered.					
Abatement measures waste air and solid waste	Due to is negligible vapour pressure potassium iodide is not expected to be found in the solid waste nor to reach the air					
4.3 Waste related measures						
o Type of waste	Packaging materials					
o Disposal technique	Disposal technique The containers and packaging materials should be disposed in accordance with local requirements.					
5. Prediction of exposure resulting from the conditions described above and the substance properties.						
5.1 Human exposure						
Inhalation Systemic effects - Long-term DNEL (Dose dérivée sans effet): 0.035 mg/m³						

Inhalation Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Long-term	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Acute	Aucun risque identifié.
Oral Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Oral Systemic effects - Acute	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Dermal Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 1 mg/kg bw/day
Dermal Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Dermal Local effects - Long-term	Aucun risque identifié.
Dermal Local effects - Acute	Aucun risque identifié.
Eyes Local effects	Aucun risque identifié.

5.2 Environmental exposure

5.2.1 Aquatic compartment (including sediment) - ECOSAR v.1.00 program operated by EPA

Organism	Duration	End Point	Result (mg/L)
Fish	96-hr	LC50	6736.780
Fish	14-day	LC50	6600.207
Daphnid	48-hr	LC50	2844.798
Green Algae	96-hr	EC50	577.397
Fish	30-day	CHV	615.632
Daphnid	-	CHV	241.908
Green Algae	-	CHV	159.232
Fish ((SW)	-	CHV	10867.097
Mysid Shrimp	96-hr	LC50	27123.457
Fish ((SW)	-	CHV	318.739
Mysid Shrimp (SW)	-	CHV	4186.333
Earthworm	14-day	LC50	460.463

5.2.2 Terrestrial compartment

The direct release to soil can be excluded for the exposure scenario. For indirect exposure to soil, firstly the low vapour pressure and high water solubility can prove that little iodide will distribute in air, which means no potassium iodide will be deposited from air.

Secondly, the adsorption to sludge can be excluded due to high water solubility and low adsorption potential; thus the indirect exposure to soil on sludge application can be ruled out. In conclusion, the exposure to soil is unlikely.

6. PBT and vPvB assessment

PBT assessment does not apply.

According to REACH regulation 1907/2006 Annex XIII PBT/vPvB assessment does not apply for inorganic substances.

1. Short title of scenario 6

Additive in cleaning, washing or disinfectant agents

2. Description and processes covered in the exposure scenario

Sector of use (SU)	SU 10: Formulation [mixing] of preparations and/or repackaging (excluding alloys) SU 20: Health services
Product category (PC)	PC 8, PC 35
Process category (PROC)	PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 13: Use as laboratory reagent
Article category (AC)	Not applicable
Environmental release category (ERC)	ERC 7: Industrial use of sub-stances in closed systems ERC 8a: Wide dispersive indoor use of processing aids in open systems

3. Exposure scenario 1 : Additives in cleaning, washing or disinfectant agents

3.1 Environmental contributing scenario 1: Additives in cleaning, washing or disinfectant agents

Conditions of use	Not defined
Releases	Not defined

Exposure risks for the environment and man via environment:

Potassium iodide is very stable under ordinary conditions of use and storage. The phototransformation in air is irrelevant to potassium iodide, because few potassium iodide can be distributed in air for the low vapour pressure and high water solubility

Hydrolysis is not a concern to such inorganic substance which can be completely ionized in water phase. Potassium iodide will completely dissociate in water giving potassium ion and iodide anion

The potassium iodide is readily absorbed by organisms as K+ and I-, which are both small (an)ions and well known not likely to be bioaccumulated

Based on the intrinsic prosperities of potassium iodide, the substance can be expected to have a low potential for adsorption (completely ionized to small ions in water phase). The potassium ion and iodide anion are uniformly distributed in water phase. In the air, these two basic (an)ions is negligible, due to high water solubility and low vapour pressure. To sediment and soil phases, these two (an)ions are mostly distributed in the pore water.

3.2 Worker contributing scenario 1: Use in closed process, no likelihood of exposure (PROC 1)

3.2.1 Conditions of use (TRA Worker)	3.2.1 Conditions of use (TRA Worker)					
Product characteristics						
 Physical state 	Solid					
 Dustiness of material 	Low					
 Concentration of substance mixture 	Substance as such (100%)					
Amount used, frequency and duration of use	/exposure					
 Duration of activity 	< 8 hours					
Technical and organizational conditions and measure	sures					
Other relevant operational conditions						
o General ventilation	Basic general ventilation (1-3 air changes per hour)					
o Containment	Closed system (minimal contact during routine operations)					
 Local exhaust ventilation 	No [Effectiveness Inhalation: 0%]					
 Occupational Health and Safety Management System 	Advanced					
Conditions and measures related to personal prot	ection, hygiene and health evaluation					
 Dermal Protection 	No [Effectiveness Dermal: 0%]					
o Respiratory Protection	No [Effectiveness Inhalation: 0%]					
Other conditions affecting workers exposure						
o Place of use	Indoors					
 Process temperature (for solid) 	Ambient (default)					
 Skin surface potentially exposed 	One hand face only (240 cm2)					
1						

3.2.2 Exposure concentrations and risks for workers

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.01 mg/m³ (TRA Worker)	RCR = 0.143
Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.01 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Dermal, systemic, long-term	0.034 mg/m³ (TRA Worker)	RCR = 0.034
Dermal, systemic, acute		Qualitative
Combined routes, systemic, long-term		RCR = 0.177

3.3 Worker contributing scenario 2: occasional controlled exposure (PR		closed process, con	tinuous process with		
3.3.1 Conditions of use (TRA Worker)					
Product characteristics					
o Physical state		Solid			
Dustiness of material		Low			
 Concentration of substance mixtu 	re	Substance as such (100	0%)		
Amount used, frequency and duration of us	se/expc	sure			
 Duration of activity 		< 8 hours			
Technical and organizational conditions an	d meas	sures			
Other relevant operational conditions					
 General ventilation 		Basic general ventilation	n (1-3 air changes per hour)		
 Containment 		Closed system (minimal	contact during routine operations)		
 Local exhaust ventilation 		No [Effectiveness Inhala	ation: 0%]		
 Occupational Health and Safety Management System 		Advanced			
Conditions and measures related to persor	nal prot	ection, hygiene and healtl	h evaluation		
o Dermal Protection		No [Effectiveness Derm	al: 0%]		
 Respiratory Protection 		No [Effectiveness Inhalation: 0%]			
Other conditions affecting workers exposur	е				
 Place of use 		Indoors			
 Process temperature (for solid) 		Ambient (default)			
 Skin surface potentially exposed 		Two hands face (480 c	m2)		
3.3.2 Exposure concentrations and risk	ks for v	vorkers			
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation		
Inhalation, systemic, long-term	0.006	6 mg/m³ (TRA Worker)	RCR = 0.086		
Inhalation, systemic, acute	0.04	mg/m³ (TRA Worker)	Qualitative		
Inhalation, local, long-term	0.006	6 mg/m³ (TRA Worker)	Qualitative		
Inhalation, local, acute	0.04	mg/m³ (TRA Worker)	Qualitative		
Dermal, systemic, long-term	0.822	2 mg/m³ (TRA Worker)	RCR = 0.822		
Dermal, systemic, acute			Qualitative		
Combined routes, systemic, long-term			RCR = 0.908		
3.4 Worker contributing scenario 3: Use in closed batch process (synthesis or formulation) (PROC 3)					
3.4.1 Conditions of use (TRA Worker)					
Product characteristics					
o Physical state		Solid			
Dustiness of material		Low			

 Concentration of substance mixture 	re	Substance as such (100%)		
Amount used, frequency and duration of us	se/expo	·		
o Duration of activity		< 8 hours		
Technical and organizational conditions and	d meas	sures		
Other relevant operational conditions				
o General ventilation		Basic general ventilation	n (1-3 air changes per hour)	
o Containment		Closed system (minimal	contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhala	ation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to person	al prot	ection, hygiene and healtl	n evaluation	
 Dermal Protection 		No [Effectiveness Derm	al: 0%]	
 Respiratory Protection 		No [Effectiveness Inhala	ation: 0%]	
Other conditions affecting workers exposur	е			
o Place of use		Indoors		
 Process temperature (for solid) 		Ambient (default)		
 Skin surface potentially exposed 		One hand face only (240 cm2)		
3.4.2 Exposure concentrations and risk	s for v	vorkers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.07	mg/m³ (TRA Worker)	RCR = 1	
Inhalation, systemic, acute 0.28 ii		mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.07	mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.28	mg/m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.69	mg/m ³ (TRA Worker)	RCR = 0.69	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 1.69	
3.5 Worker contributing scenario 4: opportunity for exposure arises (PR		batch and other prod	cess (synthesis) where	
3.5.1 Conditions of use (TRA Worker)				
Product characteristics				
 Physical state 		Solid		
o Dustiness of material		Low		
Concentration of substance mixture		Substance as such (100	9%)	
Amount used, frequency and duration of use/exposure				
Duration of activity		< 8 hours		
Technical and organizational conditions and measures				
Other relevant operational conditions				
 General ventilation 		Basic general ventilation (1-3 air changes per hour)		

0	o Containment Clo		Close	osed system (minimal contact during routine operations)		
0			No [E	No [Effectiveness Inhalation: 0%]		
0	Management System Ac		Adva			
Conditio	ons and measures related to person	al prot	ection,	hygiene and health	n evaluation	
0	Dermal Protection		No [E	Effectiveness Derm	al: 0%]	
0	Respiratory Protection		No [E	Effectiveness Inhala	ation: 0%]	
Other co	onditions affecting workers exposure	е				
0	Place of use		Indoo	ors		
0	Process temperature (for solid)			ent (default)		
0	Skin surface potentially exposed		l	hands face (480 cn	n2)	
3.5.2 E	xposure concentrations and risk	s for v	worker	rs	1	
Route o	of exposure and type of effects	Expo	sure o	concentration	Risk characterisation	
Inhalatio	on, systemic, long-term	0.05	mg/m ³	(TRA Worker)	RCR = 0.714	
Inhalatio	on, systemic, acute	0.2 m	ng/m³ ((TRA Worker)	Qualitative	
Inhalatio	on, local, long-term	0.05	0.05 mg/m³ (TRA Worker)		Qualitative	
Inhalatio	on, local, acute	0.2 m	0.2 mg/m³ (TRA Worker)		Qualitative	
Dermal,	systemic, long-term	0.686	6 mg/n	n ³ (TRA Worker)	RCR = 0.686	
Dermal,	systemic, acute				Qualitative	
Combin	ed routes, systemic, long-term				RCR = 1.4	
	rker contributing scenario 6: rging) from/to vessels/large c					
3.7.1 C	onditions of use (TRA Worker)					
Product	characteristics					
0	Physical state			Solid		
0	Dustiness of material			Low		
0	Concentration of substance mixtur	e		Substance as such (100%)		
Amount	used, frequency and duration of us	e/expo	sure			
 Duration of activity 			< 8 hours			
Technical and organizational conditions and measures		sures				
Other relevant operational conditions						
0	General ventilation			-	ntilation (1-3 air changes per hour)	
o Containment		Closed system (minimal contact during routine operations)				
0	Local exhaust ventilation		No [Effectiveness Inhalation: 0%]			
Occupational Health and Safety Management System		Advanced				

Conditions and measures related to person	al			
orotection, hygiene and health evaluation o Dermal Protection		No [Effectiveness Dermal: 0%]		
Respiratory Protection		No [Effectivenes		
Other conditions affecting workers exposure			a.a.a , o ₁	
Place of use		Indoors		
5 4 4 45 1110		Ambient (default	N	
		•		
Skin surface potentially exposed		Two hands (960	CITIZ)	
3.7.2 Exposure concentrations and risk			T	
Route of exposure and type of effects		re concentration	Risk characterisation	
Inhalation, systemic, long-term		/m³ (TRA Worker)	RCR = 0.429	
Inhalation, systemic, acute		m ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.03 mg	/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.2 mg/ı	m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.823 m	g/m³ (TRA Worker)	RCR = 0.823	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 1.251	
3.8 Worker contributing scenario 7: discharging) from/to vessels/large contributions				
3.8.1 Conditions of use (TRA Worker)				
Product characteristics				
, , , , , , , , , , , , , , , , , , , ,		olid		
Dustiness of material		ow		
Concentration of substance mixture		ubstance as such (100	J%)	
Amount used, frequency and duration of use/expo		8 hours		
 Duration of activity Technical and organizational conditions and 				
Other relevant operational conditions	a measure			
General ventilation	В	asic general ventilatio	n (1-3 air changes per hour)	
 Containment 	С	Closed system (minimal contact during routine operations)		
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]		
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to person	al protecti	ion, hygiene and healt	h evaluation	
o Dermal Protection	N	No [Effectiveness Dermal: 0%]		
o Respiratory Protection	N	No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure				
Place of use		ndoors		

Process temperature (for solid)	Amhi	ient (default)	
Skin surface potentially exposed	+	hands (960 cm2)	
3.8.2 Exposure concentrations and risk	I		
Route of exposure and type of effects	Exposure of	concentration	Risk characterisation
Inhalation, systemic, long-term	0.005 mg/n	n ³ (TRA Worker)	RCR = 0.071
Inhalation, systemic, acute	0.02 mg/m ³	(TRA Worker)	Qualitative
Inhalation, local, long-term	0.005 mg/n	1 ³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.02 mg/m ³	³ (TRA Worker)	Qualitative
Dermal, systemic, long-term	0.686 mg/n	n ³ (TRA Worker)	RCR = 0.686
Dermal, systemic, acute			Qualitative
Combined routes, systemic, long-term			RCR = 0.757
3.9 Worker contributing scenario 10	: Use as lab	ooratory agent (F	PROC 13)
3.9.1 Conditions of use (TRA Worker)			
Product characteristics			
 Physical state 		Solid	
 Dustiness of material 		Low	
Concentration of substance mixture		Substance as such (100%)	
Amount used, frequency and duration of use/exposure			
o Duration of activity		< 8 hours	
Technical and organizational conditions and measures			
Other relevant operational conditions			
o General ventilation		-	ntilation (1-3 air changes per hour)
 Containment 		Closed system (minimal contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhalation: 0%]	
 Occupational Health and Safety M System 	lanagement	Advanced	
Conditions and measures related to person	al		
protection, hygiene and health evaluation o Dermal Protection		No [Effectiveness	Dermal: 0%1
Respiratory Protection		No [Effectiveness Inhalation: 0%]	
Other conditions affecting workers exposure	e	-	<u>. </u>
 Place of use 		Indoors	
o Process temperature (for solid)		Ambient (default)	
Skin surface potentially exposed		One hand face only (240 cm2)	
3.9.2 Exposure concentrations and risk	s for worker	rs	

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.006 mg/m³ (TRA Worker)	RCR = 0.086
Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.006 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Dermal, systemic, long-term	0.823 mg/m³ (TRA Worker)	RCR = 0.823
Dermal, systemic, acute		Qualitative
Combined routes, systemic, long-term		RCR = 0.908

4. Risk Management Measures (RMM)

4 1	RMMs	related	to	workers

4.1 RMMs related to workers					
	Workers in the identified process/areas should be trained (a) to avoid work without protection and (b) to understand the respiratory effects of potassium iodide and (c) to follow the safer procedures instructed by the employer				
Organisational measures	General occupational hygiene measures are required to ensure safe handling of the substance. Good occupational hygiene practices have to be followed (e.g. shower and change clothes at end of work shift) to avoid any contamination of private households via the work-home-interface.				
	Avoid inhalation or ingestion. Do not eat and smoke in the workplace. Unless otherwise stated below, wear standard working clothes and shoes. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.				
	Regular training in workplace hygiene practice and proper use of personal protective equipment is required.				
	Use closed systems and covering open containers to avoid potential splashes				
o Technical measures	Store in cool, dry clean, well ventilated areas, away from oxidizer materials.				
	Do not store under direct sun light				
4.2 RMMs related to the environment					
Organisational measures	Procedural and/or control technologies are required to minimize emissions and the resulting exposure during cleaning and maintenance procedures.				
Abatement measures related with wastewater	Potassium iodide wastewater should be reused or iodine in them recovered.				
Abatement measures waste air and solid waste	Due to is negligible vapour pressure potassium iodide is not expected to be found in the solid waste nor to reach the air.				
4.3 Waste related measures					
o Type of waste	Packaging materials				

accordance with local requirements.	I	o Disposal technique	The containers and packaging materials should be disposed in accordance with local requirements.
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5. Prediction of exposure resulting from the conditions described above and the substance properties.

5.1 Human exposure

Inhalation Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.035 mg/m³
Inhalation Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Long-term	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Acute	Aucun risque identifié.
Oral Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Oral Systemic effects - Acute	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Dermal Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 1 mg/kg bw/day
Dermal Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Dermal Local effects - Long-term	Aucun risque identifié.
Dermal Local effects - Acute	Aucun risque identifié.
Eyes Local effects	Aucun risque identifié.

5.2 Environmental exposure

5.2.1 Aquatic compartment (including sediment) - ECOSAR v.1.00 program operated by EPA

Organism	Duration	End Point	Result (mg/L)
Fish	96-hr	LC50	6736.780
Fish	14-day	LC50	6600.207
Daphnid	48-hr	LC50	2844.798
Green Algae	96-hr	EC50	577.397
Fish	30-day	CHV	615.632
Daphnid	-	CHV	241.908
Green Algae	-	CHV	159.232
Fish ((SW)	-	CHV	10867.097
Mysid Shrimp	96-hr	LC50	27123.457
Fish ((SW)	-	CHV	318.739
Mysid Shrimp (SW)	-	CHV	4186.333
Earthworm	14-day	LC50	460.463

5.2.2 Terrestrial compartment

The direct release to soil can be excluded for the exposure scenario. For indirect exposure to soil, firstly the low vapour pressure and high water solubility can prove that little iodide will distribute in air, which means no potassium iodide will be deposited from air.

Secondly, the adsorption to sludge can be excluded due to high water solubility and low adsorption potential; thus the indirect exposure to soil on sludge application can be ruled out. In conclusion, the exposure to soil is

unlikely.

6. PBT and vPvB assessment

PBT assessment does not apply.

According to REACH regulation 1907/2006 Annex XIII PBT/vPvB assessment does not apply for inorganic substances.

1. Short title of scenario 7

Laboratory reagent

2. Description and	processes covered in the ex	posure scenario
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Sector of use (SU)	SU 9: Manufacture of fine chemicals SU 24: Scientific research and development
Product category (PC)	PC21
Process category (PROC)	PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 15: Use as laboratory reagent
Article category (AC)	Not applicable

3. Exposure scenario 1 : Laboratory reagent

3.1 Environmental contributing scenario 1

Conditions of use	Not defined
Releases	Not defined

Exposure risks for the environment and man via environment:

Potassium iodide is very stable under ordinary conditions of use and storage. The phototransformation in air is irrelevant to potassium iodide, because few potassium iodide can be distributed in air for the low vapour pressure and high water solubility

Hydrolysis is not a concern to such inorganic substance which can be completely ionized in water phase. Potassium iodide will completely dissociate in water giving potassium ion and iodide anion

The potassium iodide is readily absorbed by organisms as K+ and I-, which are both small (an)ions and well known not likely to be bioaccumulated

Based on the intrinsic prosperities of potassium iodide, the substance can be expected to have a low potential for adsorption (completely ionized to small ions in water phase). The potassium ion and iodide anion are uniformly distributed in water phase. In the air, these two basic (an)ions is negligible, due to high water solubility and low vapour pressure. To sediment and soil phases, these two (an)ions are mostly distributed in the pore water.

3.2 Worker contributing scenario 1:	Use ir	n closed process, no lil	kelihood of exposure (PROC 1)	
3.2.1 Conditions of use (TRA Worker)				
Product characteristics				
Physical state		Solid		
 Dustiness of material 		Low		
 Concentration of substance mixture 		Substance as such (100%	%)	
Amount used, frequency and duration	of use	, I		
Duration of activity		< 8 hours		
Technical and organizational conditions an	d meas	sures I		
Other relevant operational conditions				
o General ventilation		Basic general ventilation	(1-3 air changes per hour)	
o Containment		Closed system (minimal o	contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhalat	ion: 0%]	
Occupational Health and Safety Management System		Advanced	and the state of	
Conditions and measures related to person	iai prot	ection, nygiene and nealth	evaluation	
Dermal Protection		No [Effectiveness Derma		
o Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposur	е			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
 Skin surface potentially exposed 		One hand face only (240 cm2)		
3.2.2 Exposure concentrations and risk	ks for v	workers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.01	mg/m³ (TRA Worker)	RCR = 0.143	
Inhalation, systemic, acute	0.04	mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.01	mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.04	mg/m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term 0.034		l mg/m³ (TRA Worker)	RCR = 0.034	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.177	
3.3 Worker contributing scenario 2: Use in closed process, continuous process with occasional controlled exposure (PROC 2)			inuous process with	
3.3.1 Conditions of use (TRA Worker)				
Product characteristics				
 Physical state 		Solid		

o Dustiness of material		Low		
Concentration of substance mixture		Substance as such (100%)		
Amount used, frequency and duration of us	e/expo			
o Duration of activity		< 8 hours		
Technical and organizational conditions and	d meas	sures		
Other relevant operational conditions				
o General ventilation		Basic general ventilation	n (1-3 air changes per hour)	
o Containment		Closed system (minimal	contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhala	ation: 0%]	
Occupational Health and Safety Management System		Advanced		
Conditions and measures related to person	al prot	ection, hygiene and healtl	n evaluation	
o Dermal Protection		No [Effectiveness Derm	al: 0%]	
o Respiratory Protection		No [Effectiveness Inhala	ation: 0%]	
Other conditions affecting workers exposure	е			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
 Skin surface potentially exposed 		Two hands face (480 cm2)		
3.3.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term 0.006		mg/m³ (TRA Worker)	RCR = 0.086	
Inhalation, systemic, acute	0.04	mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.006	mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.04	mg/m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.822	2 mg/m ³ (TRA Worker)	RCR = 0.822	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.908	
3.4 Worker contributing scenario 3: Use in closed batch process (synthesis or formulation) (PROC 3)				
3.4.1 Conditions of use (TRA Worker)				
Product characteristics				
o Physical state	Solid			
Dustiness of material		Low		
Concentration of substance mixtur		Substance as such (100%)		
Amount used, frequency and duration of use/exposure				
o Duration of activity < 8 hours				
Technical and organizational conditions and measures				

Other relevant operational conditions			
o General ventilation		Basic general ventilation (1-3 air changes per hour)	
 Containment 		Closed system (minima	al contact during routine operations)
Local exhaust ventilation		No [Effectiveness Inhal	ation: 0%]
 Occupational Health and Safety Management System 		Advanced	
Conditions and measures related to person	al prot	ection, hygiene and heal	th evaluation
o Dermal Protection		No [Effectiveness Derm	nal: 0%]
o Respiratory Protection		No [Effectiveness Inhal	ation: 0%]
Other conditions affecting workers exposure	е		
o Place of use		Indoors	
o Process temperature (for solid)		Ambient (default)	
 Skin surface potentially exposed 		One hand face only (24	10 cm2)
3.4.2 Exposure concentrations and risk	s for v	workers	
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation
Inhalation, systemic, long-term		mg/m ³ (TRA Worker)	RCR = 1
Inhalation, systemic, acute	0.28	mg/m ³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.07	mg/m ³ (TRA Worker)	Qualitative
Inhalation, local, acute 0.28		mg/m ³ (TRA Worker)	Qualitative
Dermal, systemic, long-term	0.69	mg/m ³ (TRA Worker)	RCR = 0.69
Dermal, systemic, acute			Qualitative
Combined routes, systemic, long-term			RCR = 1.69
3.5 Worker contributing scenario 4: opportunity for exposure arises (PR		n batch and other pro	cess (synthesis) where
3.5.1 Conditions of use (TRA Worker)			
Product characteristics			
o Physical state		Solid	
 Dustiness of material 		Low	
 Concentration of substance mixture 		Substance as such (100%)	
Amount used, frequency and duration of us	e/expc	1	
Duration of activity		< 8 hours	
Technical and organizational conditions and	d meas	sures I	
Other relevant operational conditions			
General ventilation		Basic general ventilation (1-3 air changes per hour)	
o Containment		Closed system (minimal contact during routine operations)	
 Local exhaust ventilation 		No [Effectiveness Inhalation: 0%]	
 Occupational Health and Safety Management System 		Advanced	

Conditions and measures related to person	nal protection,	hygiene and healt	h evaluation
o Dermal Protection No [E		[Effectiveness Dermal: 0%]	
Respiratory Protection No [E]		Effectiveness Inhal	ation: 0%]
Other conditions affecting workers exposur	re		
o Place of use	Indo	ors	
o Process temperature (for solid)		ient (default)	
 Skin surface potentially exposed 		hands face (480 cr	m2)
3.5.2 Exposure concentrations and risk	ks for worke	rs	
Route of exposure and type of effects		concentration	Risk characterisation
Inhalation, systemic, long-term	0.05 mg/m ³	³ (TRA Worker)	RCR = 0.714
Inhalation, systemic, acute	0.2 mg/m ³	(TRA Worker)	Qualitative
Inhalation, local, long-term	0.05 mg/m ³	³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.2 mg/m ³	(TRA Worker)	Qualitative
Dermal, systemic, long-term	0.686 mg/n	n ³ (TRA Worker)	RCR = 0.686
Dermal, systemic, acute			Qualitative
Combined routes, systemic, long-term			RCR = 1.4
3.7 Worker contributing scenario 6: discharging) from/to vessels/large c			
3.7.1 Conditions of use (TRA Worker)			
Product characteristics			
o Physical state		Solid	
Dustiness of material		Low	
Concentration of substance mixture		Substance as su	ch (100%)
Amount used, frequency and duration of use/exposure			
 Duration of activity 		< 8 hours	
Technical and organizational conditions an	d measures		
Other relevant operational conditions			
o General ventilation		Basic general ventilation (1-3 air changes per hour)	
o Containment		Closed system (minimal contact during routine operations)	
Local exhaust ventilation		No [Effectiveness Inhalation: 0%]	
Occupational Health and Safety M System	_	Advanced	
Conditions and measures related to persor protection, hygiene and health evaluation	nal		
Dermal Protection		No [Effectiveness Dermal: 0%]	
Respiratory Protection		No [Effectivenes	S Dellilai. 070]

Other conditions affecting workers exposur	re			
o Place of use		Indoors		
Process temperature (for solid)		Ambient (default)		
Skin surface potentially exposed		Two hands (960	cm2)	
3.7.2 Exposure concentrations and risks for worker		rs		
·		concentration	Risk characterisation	
Inhalation, systemic, long-term	0.03 mg/m	³ (TRA Worker)	RCR = 0.429	
Inhalation, systemic, acute	0.2 mg/m ³	(TRA Worker)	Qualitative	
Inhalation, local, long-term		³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.2 mg/m ³	(TRA Worker)	Qualitative	
Dermal, systemic, long-term	+	n ³ (TRA Worker)	RCR = 0.823	
Dermal, systemic, acute		,	Qualitative	
Combined routes, systemic, long-term			RCR = 1.251	
3.8 Worker contributing scenario 7:	Transfer of	substance or n		
discharging) from/to vessels/large of				
3.8.1 Conditions of use (TRA Worker)				
Product characteristics	duct characteristics			
 Physical state 	Physical state Solid			
 Dustiness of material 				
·		stance as such (100	0%)	
Amount used, frequency and duration of use/exposure				
, , , , , , , , , , , , , , , , , , ,		nours		
Technical and organizational conditions and measure				
Other relevant operational conditions				
o General ventilation Basi		asic general ventilation (1-3 air changes per hour)		
o Containment	Clos	losed system (minimal contact during routine operations)		
Local exhaust ventilation	No [lo [Effectiveness Inhalation: 0%]		
Occupational Health and Safety		Advanced		
Conditions and measures related to persor	nal protection	, hygiene and healt	h evaluation	
o Dermal Protection	No [o [Effectiveness Dermal: 0%]		
Respiratory Protection No [I		o [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposur				
o Place of use	Indo	oors		
Process temperature (for solid) Ambie		pient (default)		
 Skin surface potentially exposed 	Two	p hands (960 cm2)		
3.8.2 Exposure concentrations and risl	ks for worke	rs		

Route of exposure and type of effects	Exposure concentration		Risk characterisation	
Inhalation, systemic, long-term	0.005 mg/m³ (TRA Worker)		RCR = 0.071	
Inhalation, systemic, acute	0.02 mg/m³ (TRA Worker)		Qualitative	
Inhalation, local, long-term	0.005 mg/m	n ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.02 mg/m ³	(TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.686 mg/m	n ³ (TRA Worker)	RCR = 0.686	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.757	
3.9 Worker contributing scenario 10	: Use as lab	oratory agent (P	PROC 15)	
3.9.1 Conditions of use (TRA Worker)				
Product characteristics				
o Physical state		Solid		
o Dustiness of material		Low		
Concentration of substance mixtur	re	Substance as suc	ch (100%)	
Amount used, frequency and duration of us	Amount used, frequency and duration of use/exposure			
o Duration of activity		< 8 hours		
Technical and organizational conditions and measures				
Other relevant operational conditions				
o General ventilation		-	ntilation (1-3 air changes per hour)	
o Containment		Closed system (m operations)	ninimal contact during routine	
 Local exhaust ventilation 		No [Effectiveness	Inhalation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to person protection, hygiene and health evaluation	Conditions and measures related to personal			
Dermal Protection			No [Effectiveness Dermal: 0%]	
Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposur	Other conditions affecting workers exposure			
o Place of use		Indoors		
o Process temperature (for solid)		Ambient (default)		
Skin surface potentially exposed	entially exposed		One hand face only (240 cm2)	
3.9.2 Exposure concentrations and risks for workers				
Route of exposure and type of effects	Exposure of	concentration	Risk characterisation	
Inhalation, systemic, long-term	0.07 mg/m³ (TRA Worker)		RCR = 1	
Inhalation, systemic, acute	0.28 mg/m³ (TRA Worker)		Qualitative	

Inhalation, local, long-term	0.07 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.28 mg/m ³ (TRA Worker)	Qualitative
Dermal, systemic, long-term	0.34 mg/m ³ (TRA Worker)	RCR = 0.34
Dermal, systemic, acute		Qualitative
Combined routes, systemic, long-term		RCR = 1.34

4. Risk Management Measures (RMM)

4. Nisk management measures (Kimm)			
4.1 RMMs related to workers			
	Workers in the identified process/areas should be trained (a) to avoid work without protection and (b) to understand the respiratory effects of potassium iodide and (c) to follow the safer procedures instructed by the employer		
 Organisational measures 	General occupational hygiene measures are required to ensure safe handling of the substance. Good occupational hygiene practices have to be followed (e.g. shower and change clothes at end of work shift) to avoid any contamination of private households via the work-home-interface.		
	Avoid inhalation or ingestion. Do not eat and smoke in the workplace. Unless otherwise stated below, wear standard working clothes and shoes. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.		
	Regular training in workplace hygiene practice and proper use of personal protective equipment is required.		
	Use closed systems and covering open containers to avoid potential splashes		
 Technical measures 	Store in cool, dry clean, well ventilated areas, away from oxidizer materials.		
	Do not store under direct sun light		
4.2 RMMs related to the environment			
 Organisational measures 	Procedural and/or control technologies are required to minimize emissions and the resulting exposure during cleaning and maintenance procedures.		
Abatement measures related with wastewater	Potassium iodide wastewater should be reused or iodine in them recovered.		
 Abatement measures waste air and solid waste 	Due to is negligible vapour pressure potassium iodide is not expected to be found in the solid waste nor to reach the air		
4.3 Waste related measures	•		
o Type of waste	Packaging materials		
o Disposal technique	The containers and packaging materials should be disposed in accordance with local requirements.		
5. Prediction of exposure resul	ting from the conditions described above and the substance		

5. Prediction of exposure resulting from the conditions described above and the substance properties.

5.1 Human exposure	
Inhalation Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.035 mg/m³
Inhalation Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Long-term	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Acute	Aucun risque identifié.
Oral Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Oral Systemic effects - Acute	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Dermal Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 1 mg/kg bw/day
Dermal Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Dermal Local effects - Long-term	Aucun risque identifié.
Dermal Local effects - Acute	Aucun risque identifié.
Eyes Local effects	Aucun risque identifié.

5.2 Environmental exposure

5.2.1 Aquatic compartment (including sediment) - ECOSAR v.1.00 program operated by EPA

Organism	Duration	End Point	Result (mg/L)
Fish	96-hr	LC50	6736.780
Fish	14-day	LC50	6600.207
Daphnid	48-hr	LC50	2844.798
Green Algae	96-hr	EC50	577.397
Fish	30-day	CHV	615.632
Daphnid	-	CHV	241.908
Green Algae	-	CHV	159.232
Fish ((SW)	-	CHV	10867.097
Mysid Shrimp	96-hr	LC50	27123.457
Fish ((SW)	-	CHV	318.739
Mysid Shrimp (SW)	-	CHV	4186.333
Earthworm	14-day	LC50	460.463

5.2.2 Terrestrial compartment

The direct release to soil can be excluded for the exposure scenario. For indirect exposure to soil, firstly the low vapour pressure and high water solubility can prove that little iodide will distribute in air, which means no potassium iodide will be deposited from air.

Secondly, the adsorption to sludge can be excluded due to high water solubility and low adsorption potential; thus the indirect exposure to soil on sludge application can be ruled out. In conclusion, the exposure to soil is unlikely.

6. PBT and vPvB assessment

PBT assessment does not apply.

According to REACH regulation 1907/2006 Annex XIII PBT/vPvB assessment does not apply for inorganic substances.

4. EXPOSURE SCENARIOS FOR USES BY PROFESSIONAL WORKERS

1. Short title of scenario 8

Re-packing of potassium iodide

2. Description and processes covered in the exposure scenario

Sector of use (SU)	SU 10: Formulation [mixing] of preparations and/or repackaging (excluding alloys)
Product category (PC)	PC 19, PC 20, PC 21
Process category (PROC)	PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation
Article category (AC)	Not applicable
Environmental release category (ERC)	ERC 7: Industrial use of substances in closed systems

3. Exposure scenario 1 : Re-packing of potassium iodide

3.1 Environmental contributing scenario 1

Conditions of use	Not defined
Releases	Not defined

Exposure risks for the environment and man via environment:

Potassium iodide is very stable under ordinary conditions of use and storage. The phototransformation in air is irrelevant to potassium iodide, because few potassium iodide can be distributed in air for the low vapour pressure and high water solubility

Hydrolysis is not a concern to such inorganic substance which can be completely ionized in water phase. Potassium iodide will completely dissociate in water giving potassium ion and iodide anion

The potassium iodide is readily absorbed by organisms as K+ and I-, which are both small (an)ions and well

known not likely to be bioaccumulated

Based on the intrinsic prosperities of potassium iodide, the substance can be expected to have a low potential for adsorption (completely ionized to small ions in water phase). The potassium ion and iodide anion are uniformly distributed in water phase. In the air, these two basic (an)ions is negligible, due to high water solubility and low vapour pressure. To sediment and soil phases, these two (an)ions are mostly distributed in the pore water.

3.2 Worker contributing scenario 1: Use in closed process, no likelihood of exposure (PROC 1)

3.2.1 Conditions of use (TRA Worker)	3.2.1 Conditions of use (TRA Worker)				
Product characteristics					
 Physical state 	Solid				
 Dustiness of material 	Low				
 Concentration of substance mixture 	Substance as such (100%)				
Amount used, frequency and duration of use.	/exposure				
Duration of activity	< 8 hours				
Technical and organizational conditions and measures					
Other relevant operational conditions					
o General ventilation	Basic general ventilation (1-3 air changes per hour)				
o Containment	Closed system (minimal contact during routine operations)				
 Local exhaust ventilation 	No [Effectiveness Inhalation: 0%]				
 Occupational Health and Safety Management System 	Advanced				
Conditions and measures related to personal protection, hygiene and health evaluation					
o Dermal Protection	No [Effectiveness Dermal: 0%]				
Respiratory Protection	No [Effectiveness Inhalation: 0%]				
Other conditions affecting workers exposure					
o Place of use	Indoors				
o Process temperature (for solid)	Ambient (default)				
 Skin surface potentially exposed 	One hand face only (240 cm2)				
1					

3.2.2 Exposure concentrations and risks for workers

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.01 mg/m³ (TRA Worker)	RCR = 0.143
Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.01 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Dermal, systemic, long-term	0.034 mg/m³ (TRA Worker)	RCR = 0.034
Dermal, systemic, acute		Qualitative
Combined routes, systemic, long-term		RCR = 0.177

3.3 Worker contributing scenario 2: 0 occasional controlled exposure (PRO		losed process, con	tinuous process with	
3.3.1 Conditions of use (TRA Worker)				
Product characteristics				
o Physical state	S	Solid		
o Dustiness of material	L	-OW		
 Concentration of substance mixtur 	e S	Substance as such (100	0%)	
Amount used, frequency and duration of us	e/exposu	ire		
 Duration of activity 	<	< 8 hours		
Technical and organizational conditions and	d measure	es		
Other relevant operational conditions				
o General ventilation	В	Basic general ventilation	n (1-3 air changes per hour)	
 Containment 	C	Closed system (minimal	contact during routine operations)	
 Local exhaust ventilation 	N	No [Effectiveness Inhala	ation: 0%]	
 Occupational Health and Safety Management System 		Advanced		
Conditions and measures related to person	al protect	tion, hygiene and health	n evaluation	
 Dermal Protection 	٨	No [Effectiveness Derm	al: 0%]	
Respiratory Protection		No [Effectiveness Inhalation: 0%]		
Other conditions affecting workers exposure	е			
 Place of use 	Ir	ndoors		
 Process temperature (for solid) 	Α	Ambient (default)		
 Skin surface potentially exposed 	Skin surface potentially exposed T		m2)	
3.3.2 Exposure concentrations and risk	s for wo	rkers		
Route of exposure and type of effects	Exposu	ure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.006 m	ng/m³ (TRA Worker)	RCR = 0.086	
Inhalation, systemic, acute	0.04 mg	g/m³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.006 m	ng/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.04 mg	g/m³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.822 m	ng/m³ (TRA Worker)	RCR = 0.822	
Dermal, systemic, acute	al, systemic, acute		Qualitative	
Combined routes, systemic, long-term	routes, systemic, long-term		RCR = 0.908	
3.7 Worker contributing scenario 6: Transfer of substance or preparation (charging/ discharging) from/to vessels/large containers at non-dedicated facilities (PROC 8a)				
3.7.1 Conditions of use (TRA Worker)				
Product characteristics				
o Physical state		Solid		

o Dustiness of material		Low		
Concentration of substance mixture		Substance as su	ch (100%)	
Amount used, frequency and duration of use/exposure				
Duration of activity		< 8 hours		
Technical and organizational conditions and	d measures	:		
Other relevant operational conditions				
o General ventilation		Basic general ve	ntilation (1-3 air changes per hour)	
 Containment 		Closed system (r operations)	ninimal contact during routine	
Local exhaust ventilation		No [Effectiveness	s Inhalation: 0%]	
Occupational Health and Safety M System	_	Advanced		
Conditions and measures related to person protection, hygiene and health evaluation	nal			
Dermal Protection		No [Effectiveness	s Dermal: 0%]	
Respiratory Protection		No [Effectiveness	s Inhalation: 0%]	
Other conditions affecting workers exposur	e			
Place of use		Indoors	Indoors	
Process temperature (for solid)		Ambient (default)		
Skin surface potentially exposed		Two hands (960	cm2)	
3.7.2 Exposure concentrations and risks for worker		ers		
		concentration	Risk characterisation	
Inhalation, systemic, long-term			RCR = 0.429	
Inhalation, systemic, acute	0.2 mg/m	³ (TRA Worker)	Qualitative	
		m ³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.2 mg/m	³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.823 mg/m³ (TRA Worker		RCR = 0.823	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term	•		RCR = 1.251	
3.8 Worker contributing scenario 7: Transfer of substance or preparation (charging/				
discharging) from/to vessels/large c	ontainers	at dedicated faci	lities (PROC 8b)	
3.8.1 Conditions of use (TRA Worker)				
Product characteristics		: J		
o Physical state	Sol	-		
Dustiness of material	Lov		2007	
Concentration of substance mixtur		ostance as such (100	J%)	
Amount used, frequency and duration of us				
 Duration of activity 	< 8	hours		

Technical and organizational conditions and measures				
Other relevant operational conditions				
General ventilation		Basic general ventilation (1-3 air changes per hour)		
o Containment		Closed system (minima	I contact during routine operations)	
Local exhaust ventilation		No [Effectiveness Inhala	ation: 0%]	
Occupational Health and Safety		Advanced		
Management System Conditions and measures related to person	al prot		h evaluation	
Dermal Protection	•	No [Effectiveness Derm		
Respiratory Protection		No [Effectiveness Inhala		
Other conditions affecting workers exposur	<u> </u>			
Place of use		Indoors		
Process temperature (for solid)		Ambient (default)		
Skin surface potentially exposed		Two hands (960 cm2)		
3.8.2 Exposure concentrations and risk	s for v	workers		
Route of exposure and type of effects	Expo	sure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.005	5 mg/m³ (TRA Worker)	RCR = 0.071	
Inhalation, systemic, acute	0.02	mg/m ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.005	5 mg/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.02	mg/m ³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term 0.686		6 mg/m ³ (TRA Worker)	RCR = 0.686	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.757	
3.9 Worker contributing scenario 8: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) (PROC 9)				
3.9.1 Conditions of use (TRA Worker)				
Product characteristics				
Physical state		Solid		
Dustiness of material			Low	
Concentration of substance mixture		Substance as such (100%)		
Amount used, frequency and duration of use/exposure				
o Duration of activity	 Duration of activity 		< 8 hours	
Technical and organizational conditions and measur		sures		
Other relevant operational conditions				
 General ventilation 		Basic general ventilation (1-3 air changes per hour)		
 Containment 		Closed system (minimal contact during routine operations)		
 Local exhaust ventilation 		No [Effectiveness Inhalation: 0%]		

Occupational Health and Safety Management System		Advanced		
Conditions and measures related to personal protection		ction, hygiene and healt	on, hygiene and health evaluation	
o Dermal Protection N		No [Effectiveness Dermal: 0%]		
Respiratory Protection No.		No [Effectiveness Inhala	ation: 0%]	
Other conditions affecting workers exposur	re .			
o Place of use		Indoors		
o Process temperature (for solid)	,	Ambient (default)		
 Skin surface potentially exposed 		Two hands face (480 cr	m2)	
3.9.2 Exposure concentrations and risk	ks for wo	orkers		
Route of exposure and type of effects	Expos	ure concentration	Risk characterisation	
Inhalation, systemic, long-term	0.01 m	ng/m³ (TRA Worker)	RCR = 0.143	
Inhalation, systemic, acute	0.04 m	ng/m ³ (TRA Worker)	Qualitative	
Inhalation, local, long-term	0.01 m	ng/m³ (TRA Worker)	Qualitative	
Inhalation, local, acute	0.04 m	ng/m³ (TRA Worker)	Qualitative	
Dermal, systemic, long-term	0.686 ı	mg/m³ (TRA Worker)	RCR = 0.686	
Dermal, systemic, acute			Qualitative	
Combined routes, systemic, long-term			RCR = 0.829	
3.10 Worker contributing scenario 9			s or articles by tabletting,	
compression, extrusion pelletisation	n (PROC	C 14)		
3.10.1 Conditions of use				
Product characteristics				
Product characteristics o Physical state		Solid		
		Solid Low		
o Physical state	re		ch (100%)	
Physical stateDustiness of material		Low Substance as su	ch (100%)	
 Physical state Dustiness of material Concentration of substance mixture 		Low Substance as su	ch (100%)	
 Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of use 	se/expos	Low Substance as su ure < 8 hours	ch (100%)	
 Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of use Duration of activity 	se/expos	Low Substance as su ure < 8 hours	ch (100%)	
 Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of use Duration of activity Technical and organizational conditions and 	se/expos	Low Substance as su ure < 8 hours	ch (100%) ntilation (1-3 air changes per hour)	
 Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of use Duration of activity Technical and organizational conditions and Other relevant operational conditions 	se/expos	Low Substance as su ure < 8 hours ures Basic general ve		
 Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of use Duration of activity Technical and organizational conditions and Other relevant operational conditions General ventilation 	se/expos	Low Substance as su ure < 8 hours Basic general ve Closed system (r	ntilation (1-3 air changes per hour) minimal contact during routine	
 Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of use Duration of activity Technical and organizational conditions and Other relevant operational conditions General ventilation Containment 	se/exposi	Low Substance as su ure < 8 hours Basic general ve Closed system (r operations) No [Effectiveness	ntilation (1-3 air changes per hour) minimal contact during routine	
 Physical state Dustiness of material Concentration of substance mixture Amount used, frequency and duration of use Duration of activity Technical and organizational conditions and Other relevant operational conditions General ventilation Containment Local exhaust ventilation Occupational Health and Safety M 	d measu	Low Substance as su ure < 8 hours Basic general ve Closed system (roperations) No [Effectiveness	ntilation (1-3 air changes per hour) minimal contact during routine	

o Respiratory Protection	No [Effectiveness Inhalation: 0%]
Other conditions affecting workers exposure	
o Place of use	Indoors
o Process temperature (for solid)	Ambient (default)
Skin surface potentially exposed	Two hands face (480 cm2)

3.10.2 Exposure concentrations and risks for workers

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.01 mg/m³ (TRA Worker)	RCR = 0.143
Inhalation, systemic, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.01 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.04 mg/m³ (TRA Worker)	Qualitative
Dermal, systemic, long-term	0.343 mg/m³ (TRA Worker)	RCR = 0.343
Dermal, systemic, acute		Qualitative
Combined routes, systemic, long-term		RCR = 0.486

4. Risk Management Measures (RMM)

4.1 RMMs related to workers

o Organisational measures

	Workers in the identified process/areas should be trained (a) to avoid work without protection and (b) to understand the respiratory effects of potassium iodide and (c) to follow the safer procedures instructed by the employer
 Organisational measures 	General occupational hygiene measures are required to ensure safe handling of the substance. Good occupational hygiene practices have to be followed (e.g. shower and change clothes at end of work shift) to avoid any contamination of private households via the work-home-interface.
	Avoid inhalation or ingestion. Do not eat and smoke in the workplace. Unless otherwise stated below, wear standard working clothes and shoes. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.
	Regular training in workplace hygiene practice and proper use of personal protective equipment is required.
	Use closed systems and covering open containers to avoid potential splashes
o Technical measures	Store in cool, dry clean, well ventilated areas, away from oxidizer materials.
	Do not store under direct sun light
4.2 RMMs related to the environment	

Procedural and/or control technologies are required to minimize emissions

	and the resulting exposure during cleaning and maintenance procedures.
	and the resulting exposure during cleaning and maintenance procedures.
Abatement measures related with wastewater	Potassium iodide wastewater should be reused or iodine in them recovered.
Abatement measures waste air and solid waste	Due to is negligible vapour pressure potassium iodide is not expected to be found in the solid waste nor to reach the air
4.3 Waste related measures	
o Type of waste	Packaging materials
o Disposal technique	The containers and packaging materials should be disposed in accordance with local requirements.

5. Prediction of exposure resulting from the conditions described above and the substance properties.

5.1 Human exposure

Inhalation Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.035 mg/m³
Inhalation Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Long-term	Risque inconnu (aucune autre information nécéssaire).
Inhalation Local effects - Acute	Aucun risque identifié.
Oral Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Oral Systemic effects - Acute	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day
Dermal Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 1 mg/kg bw/day
Dermal Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).
Dermal Local effects - Long-term	Aucun risque identifié.
Dermal Local effects - Acute	Aucun risque identifié.
Eyes Local effects	Aucun risque identifié.

5.2 Environmental exposure

5.2.1 Aquatic compartment (including sediment) – ECOSAR v.1.00 program operated by EPA

Organism	Duration	End Point	Result (mg/L)
Fish	96-hr	LC50	6736.780
Fish	14-day	LC50	6600.207
Daphnid	48-hr	LC50	2844.798
Green Algae	96-hr	EC50	577.397
Fish	30-day	CHV	615.632
Daphnid	-	CHV	241.908
Green Algae	-	CHV	159.232
Fish ((SW)	-	CHV	10867.097
Mysid Shrimp	96-hr	LC50	27123.457
Fish ((SW)	-	CHV	318.739

Mysid Shrimp (SW)	-	CHV	4186.333
Earthworm	14-day	LC50	460.463

5.2.2 Terrestrial compartment

The direct release to soil can be excluded for the exposure scenario. For indirect exposure to soil, firstly the low vapour pressure and high water solubility can prove that little iodide will distribute in air, which means no potassium iodide will be deposited from air.

Secondly, the adsorption to sludge can be excluded due to high water solubility and low adsorption potential; thus the indirect exposure to soil on sludge application can be ruled out. In conclusion, the exposure to soil is unlikely.

6. PBT and vPvB assessment

PBT assessment does not apply.

According to REACH regulation 1907/2006 Annex XIII PBT/vPvB assessment does not apply for inorganic substances.

1. Short title of scenario 9

Uses as laboratory reagent

2. Description and processes covered in the exposure scenario

Sector of use (SU)	SU 24: Scientific research and development
Product category (PC)	Not relevant
Process category (PROC)	PROC 15: Use as laboratory reagent
Article category (AC)	Not applicable

3. Exposure scenario 1 : Uses as laboratory agent

3.1 Environmental contributing scenario 1

Conditions of use	Not defined
Releases	Not defined

Exposure risks for the environment and man via environment:

Potassium iodide is very stable under ordinary conditions of use and storage. The phototransformation in air is irrelevant to potassium iodide, because few potassium iodide can be distributed in air for the low vapour pressure and high water solubility

Hydrolysis is not a concern to such inorganic substance which can be completely ionized in water phase. Potassium iodide will completely dissociate in water giving potassium ion and iodide anion

The potassium iodide is readily absorbed by organisms as K+ and I-, which are both small (an)ions and well known not likely to be bioaccumulated

Based on the intrinsic prosperities of potassium iodide, the substance can be expected to have a low potential for adsorption (completely ionized to small ions in water phase). The potassium ion and iodide anion are uniformly distributed in water phase. In the air, these two basic (an)ions is negligible, due to high water solubility and low vapour pressure. To sediment and soil phases, these two (an)ions are mostly distributed in the pore water.

3.9 Worker contributing scenario 1: Use as laboratory agent (PROC 15)

3.9.1 0	conditions of use (TRA Worker)	
Product characteristics		
0	Physical state	Solid
0	Dustiness of material	Low
0	Concentration of substance mixture	Substance as such (100%)
Amoun	used, frequency and duration of use/exposure	
0	Duration of activity	< 8 hours
Technic	al and organizational conditions and measures	

Other re	elevant operational conditions	
0	General ventilation	Basic general ventilation (1-3 air changes per hour)
0	Containment	Closed system (minimal contact during routine operations)
0	Local exhaust ventilation	No [Effectiveness Inhalation: 0%]
0	Occupational Health and Safety Management System	Advanced
Conditions and measures related to personal protection, hygiene and health evaluation		
0	Dermal Protection	No [Effectiveness Dermal: 0%]
0	Respiratory Protection	No [Effectiveness Inhalation: 0%]
Other c	onditions affecting workers exposure	
0	Place of use	Indoors
0	Process temperature (for solid)	Ambient (default)
0	Skin surface potentially exposed	One hand face only (240 cm2)

3.9.2 Exposure concentrations and risks for workers

Route of exposure and type of effects	Exposure concentration	Risk characterisation
Inhalation, systemic, long-term	0.07 mg/m ³ (TRA Worker)	RCR = 1
Inhalation, systemic, acute	0.28 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, long-term	0.07 mg/m³ (TRA Worker)	Qualitative
Inhalation, local, acute	0.28 mg/m³ (TRA Worker)	Qualitative
Dermal, systemic, long-term	0.34 mg/m³ (TRA Worker)	RCR = 0.34
Dermal, systemic, acute		Qualitative
Combined routes, systemic, long-term		RCR = 1.34

4. Risk Management Measures (RMM)

4.1 RMMs related to workers

Workers in the identified process/areas should be trained (a) to avoid work without protection and (b) to understand the respiratory effects of potassium iodide and (c) to follow the safer procedures instructed by the employer

o Organisational measures

General occupational hygiene measures are required to ensure safe handling of the substance. Good occupational hygiene practices have to be followed (e.g. shower and change clothes at end of work shift) to avoid any contamination of private households via the work-home-interface.

Avoid inhalation or ingestion. Do not eat and smoke in the workplace. Unless otherwise stated below, wear standard working clothes and shoes. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.

Regular training in workplace hygiene practice and proper use of personal

	protective equipment is required.		
	Use closed systems and covering open containers to avoid potential splashes		
o Technical measures	Store in cool, dry clean, well ventilated areas, away from oxidizer materials.		
	Do not store under direct sun light		
4.2 RMMs related to the environment			
Organisational measures	Procedural and/or control technologies are required to minimize emissions and the resulting exposure during cleaning and maintenance procedures.		
Abatement measures related with wastewater	Potassium iodide wastewater should be reused or iodine in them recovered.		
Abatement measures waste air and solid waste	Due to is negligible vapour pressure potassium iodide is not expected to be found in the solid waste nor to reach the air		
4.3 Waste related measures			
○ Type of waste	Packaging materials		
 Disposal technique The containers and packaging materials should be accordance with local requirements. 			
5. Prediction of exposure resulting from the conditions described above and the substance properties.			
5.1 Human exposure			
Inhalation Systemic effects - Long-ter	DNEL (Dose dérivée sans effet): 0.035 mg/m³		
Inhalation Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).		
Inhalation Local effects - Long-term	Risque inconnu (aucune autre information nécéssaire).		
Inhalation Local effects - Acute	Aucun risque identifié.		
Oral Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day		
Oral Systemic effects - Acute	DNEL (Dose dérivée sans effet): 0.01 mg/kg bw/day		
Dermal Systemic effects - Long-term	DNEL (Dose dérivée sans effet): 1 mg/kg bw/day		
Dermal Systemic effects - Acute	Risque inconnu (aucune autre information nécéssaire).		
Dermal Local effects - Long-term	Aucun risque identifié.		
Dermal Local effects - Acute	Aucun risque identifié.		
Eyes Local effects	Aucun risque identifié.		
5.2 Environmental exposure			

5.2.1 Aquatic compartment (including sediment) – ECOSAR v.1.00 program operated by EPA

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Rev 14/10/16 changes:

Scenario 7 ERC 8b removed because it's not relevant for a use as laboratory reactant

Scenario 9 ERC 4 removed for the same reason