Shell Chemicals

Technical Datasheet

ShellSol D40

Product Code	Q3362
Region	North America
Product Category	Aliphatic Mineral Spirits
CAS Registry Number	64742-48-9
Description	ShellSol D40 is a wider cut, mineral spirit type hydrocarbon solvent. The high degree of general refining gives this solvent its low level of impurities such as sulphur, olefins, benzene and total aromatics, and low odor.

Typical Properties

Property	Unit	Method	Value
API Gravity	-	ASTM D4052	48.7
Specific Gravity @15.6°C/15.6°C [60°F/60°F]	-	ASTM D4052	0.785
Density @15.6°C [60°F]	kg/L	ASTM D4052	0.784
Density @15.6°C [60°F]	lb/gal	ASTM D4052	6.55
Density @15°C	kg/m ³	ASTM D4052	785
Coefficient of Cubic Expansion @20°C [68°F]	10 ⁻⁴ /°C	Calculated	10
Refractive Index @20°C [68°F]	-	ASTM D1218	1.434
Color	Saybolt	ASTM D156	+30
Copper Corrosion (1hr @100°C)	-	ASTM D130	la
Doctor Test	-	ASTM D235	Negative
Distillation, Initial Boiling Point	°C	ASTM D86	160
Distillation, Initial Boiling Point	°F	ASTM D86	320
Distillation, 50%v	°C	ASTM D86	173
Distillation, 50%v	°F	ASTM D86	343
Distillation, Dry Point	°C	ASTM D86	197
Distillation, Dry Point	°F	ASTM D86	387
Evaporation Time (nBuAc=470sec)	seconds	ASTM D3539	4570
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	0.10

Vapor Pressure @20°C [68°F]	kPa	Calculated	0.17
Vapor Pressure @20°C [68°F]	mmHg	Calculated	1.3
Saturated Vapor Concentration @20°C [68°F]	g/m ³	Calculated	10
Volatile Organic Compound (VOC)	g/L	EU / EPA	781
Paraffins	% m/m	GC	40
Naphthenes	% m/m	GC	60
Aromatics	% m/m	GC	< 0.5
Benzene	mg/kg	GC	<]
Sulfur	mg/kg	ISO 20846	<]
Flash Point, TCC	°C	ASTM D56	44
Flash Point, TCC	°F	ASTM D56	111
Lower Explosion Limit in Air	% v/v		0.6
Upper Explosion Limit in Air	% v/v		6.0
Auto Ignition Temperature	°C	ASTM E659	270
Electrical Conductivity @20°C [68°F]	pS/m	ASTM D4308	<]
Aniline Point (M=Mixed)	°C	ASTM D611	66
Aniline Point (M=Mixed)	°F	ASTM D611	151
Kauri-Butanol Value	-	ASTM D1133	34
Pour Point	°C	ASTM D97	<-50
Pour Point	°F	ASTM D97	<-58
Hildebrand Solubility Parameter	(cal/cm ³) ^{1/2}	-	7.7
Hydrogen Bonding Index	-	-	0.0
Fractional Polarity	-	-	0.0
Surface Tension @20°C [68°F]	mN/m	-	25
Viscosity @25°C [77°F]	cSt	ASTM D445	1.37
Molecular Weight	g/mol	Calculated	146

Test Methods

Copies of copyrighted test methods can be obtained from the issuing organisations:

American Society for Testing and Materials (ASTM)	: www.astm.org
International Organization for Standardization (ISO)	: www.iso.org

N.B: For routine quality control local test methods may be applied. Such methods have been validated against those mentioned in this datasheet.

Quality

ShellSol D40 does not contain detectable quantities of polycyclic aromatics, heavy metals or chlorinated compounds.

Hazard Information

For detailed Hazard Information please refer to the Safety Data Sheet on ww.shell.com/chemicals.

Storage Handling

Provided proper storage and handling precautions are taken we would expect ShellSol D40 to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Safety Data Sheet on www.shell.com/chemicals.

Trademark

ShellSol is a Shell trademark.

All products purchased or supplied by Shell chemicals companies are subject to the terms and conditions set out in the contract, order confirmation and/or bill of lading. All other information supplied by Shell chemicals companies, including that herein, is considered accurate but is furnished upon the express condition that the customer shall make its own assessment to determine a product's suitability for a particular purpose. Except as may be set forth in the applicable contract, order confirmation and/or bill of lading, Shell chemicals companies make no warranty, express or implied, including regarding any information supplied or the data upon which it is based or the results to be obtained from the use of such products or information, or concerning product, whether of satisfactory quality, merchantability, fitness for any particular purpose or otherwise, or with respect to intellectual property infringement as a result of use of information or products, and none shall be implied.

The expression 'Shell Chemicals' refers to the companies of the Royal Dutch/Shell Group that are engaged in chemical businesses. Each of the companies that make up the Royal Dutch/Shell Group of companies is an independent entity and has its own separate identity.