Shell Chemicals

Data Sheet

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Product Name

ShellSol TD

Product Code **Q7411** **Europe**

Product Category **Isoparaffins**

CAS Registry Number 64741-65-7

EINECS Number 265-067-2

Description ShellSol TD is a synthetical isoparaffinic hydrocarbon solvent with a characteristic low odour.

Typical Properties

Property	Unit	Method	Value
Density @15°C	kg/l	ASTM D4052	0.751
Cubic Expansion Coefficient @20°C	(10^-4)/°C	Calculated	10
Refractive Index @20°C	-	ASTM D1218	1.420
Color	Saybolt	ASTM D156	+30
Bromine Index	mg Br/100g	ASTM D2710	300
Copper Corrosion (3hr @100°C)	-	ASTM D130	1
Doctor Test	-	ASTM D235	Negative
Distillation, IBP	°C	ASTM D1078	174
Distillation, DP	°C	ASTM D1078	187
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	0.16
Relative Evaporation Rate (Ether=1)	-	DIN 53170	70
Antoine Constant A #	kPa, °C	-	6.41880
Antoine Constant B #	kPa, °C	-	1745.60
Antoine Constant C #	kPa, °C	-	222.160
Antoine Constants: Temperature range	°C	-	+40 to +140
Vapor Pressure @0°C	kPa	Calculated	0.04
Vapor Pressure @20°C	kPa	Calculated	0.16
Saturated Vapor Concentration @20°C	g/m³	Calculated	11
Paraffins	% m/m	GC	> 98
Naphthenes	% m/m	GC	< 2
Aromatics	mg/kg	SMS 2728	50
Benzene	mg/kg	GC	< 3
Sulfur	mg/kg	SMS 1897	< 0.5
Flash Point	°C	IP 170	46

	Auto Ignition Temperature	°C	ASTM E659	450
	Explosion Limit: Lower	%v/v	-	0.6
	Explosion Limit: Upper	%v/v	-	6.0
	Electrical Conductivity @20°C	pS/m	-	< 1
	Dielectric Constant @20°C	-	-	2.0
	Aniline Point	°C	ASTM D611	84
	Kauri-Butanol Value	-	ASTM D1133	26
	Pour Point	°C	ASTM D97	< -50
	Surface Tension @20°C	mN/m	Du Nouy ring	23
	Viscosity @25°C	mm^2/s	ASTM D445	1.6
	Hildebrand Solubility Parameter	$(cal/cm^3)^{\wedge}½$	-	7.3
	Hydrogen Bonding Index	-	-	0
	Fractional Polarity	-	-	0
	Heat of Combustion (Net) @25°C	kJ/kg	-	45500
	Specific Heat @20°C	kJ/kg/°C	-	2.1
	Thermal Conductivity @20°C	W/m/°C	-	0.13
	Molecular Weight	g/mol	Calculated	161

(#) In the Antoine temperature range, the vapor pressure P (kPa) at temperature T (°C) can be calculated by means of the Antoine equation: log P = A - B/(T+C)

Test Methods

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

American Society for Testing and Materials (ASTM) : www.astm.org
Energy Institute (IP) : www.energyinst.org.uk
Deutsches Institut für Normung (DIN) : www.din.de

Shell Method Series (SMS) methods are issued by Shell Golabl Solutions International B.V., Shell Research and Technology Centre, Amsterdam, The Netherlands. Copies of SMS can be obtained through your local Shell Chemicals company.

For routine quality control analyses, local test methods may be applied that are different from those mentioned in this datasheet. Such methods have been validated and can be obtained through your local Shell Chemicals company.

Quality

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

Hazard Information

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

Storage and Handling

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

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