## **Shell Chemicals**



Technical Datasheet

# ShellSol T

Product Code Q7412

Region Americas

Product Category Isoparaffins

CAS Registry Number 64741-65-7

EINECS Number 265-067-2

Description ShellSol T is a synthetical isoparaffinic hydrocarbon solvent,

characterised by a low odour.

### **Typical Properties**

Property	Unit	Method	Value
Density @15°C	kg/L	ASTM D4052	0.761
Coefficient of Cubic Expansion @20°C	10 <sup>-4</sup> /°C	Calculated	10
Refractive Index @20°C	-	ASTM D1218	1.425
Colour	Saybolt	ASTM D156	+30
Bromine Index	mg Br/100g	ASTM D1492	400
Copper Corrosion (1hr @100°C)	-	ASTM D130	1
Doctor Test	-	ASTM D4952	Negative
Non Volatile Matter	mg/100ml	ASTM D1353	1
Distillation, Initial Boiling Point	°C	ASTM D86	189
Distillation, Dry Point	°C	ASTM D86	215
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	0.08
Relative Evaporation Rate (Ether=1)	-	DIN 53170	110
Antoine Constant A #	kPa, °C	-	6.71506
Antoine Constant B #	kPa, °C	-	2009.16
Antoine Constant C #	kPa, °C	-	241.891
Antoine Constants: Temperature range	°C	-	+ 40 to +140
Vapor Pressure @ 0°C	kPa	Calculated	0.03

118 ShellSol T

Vapor Pressure @ 20°C	kPa	Calculated	0.11
Saturated Vapor Concentration @ 20°C	g/m³	Calculated	8
Paraffins	% m/m	GC	>98
Naphthenes	% m/m	GC	< 2
Aromatics	mg/kg	SMS 2728	100
Benzene	mg/kg	GC	< 3
Sulfur	mg/kg	ISO 20846	< 0.5
Flash Point	°C	ASTM D93	61
Lower Explosion Limit in Air	% v/v		0.6
Upper Explosion Limit in Air	% v/v		6.0
Auto Ignition Temperature	°C	ASTM E659	430
Electrical Conductivity @ 20°C	pS/m	ASTM D4308	< 1
Dielectric Constant @ 20°C	-	-	2.1
Aniline Point	°C	ASTM D611	85
Kauri-Butanol Value	-	ASTM D1133	26
Pour Point	°C	ASTM D97	< -50
Viscosity @ 25°C	mm <sup>2</sup> /s	ASTM D445	1.9
Surface Tension @ 20°C	mN/m	Du Nouy ring	24
Thermal Conductivity @ 20°C	W/m/°C		0.13
Hildebrand Solubility Parameter	$(cal/cm^3)^{1/2}$	-	7.4
Hydrogen Bonding Index	-	-	0
Fractional Polarity	-	-	0
Heat of Vaporization at T <sub>boil</sub>	kJ/kg	-	250
Heat of Combustion (Net) @t 25°C	kJ/kg	-	45500
Specific Heat @ 20°C	kJ/kg/°C	-	2.0
Molecular Weight	g/mol	Calculated	171
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<sup>(#)</sup> In the Antoine temperature range, the vapor pressure P (kPa) at temperature T (°C) can be calculated by means of the Antoine equation:  $\log P = A - B/(T+C)$ 

118 ShellSol T April 2016

#### 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 Deutsches Institut für Normung (DIN) : www.din.de

Shell Method Series (SMS) methods are issued by Shell Global Solutions International B.V., Shell Technology Centre, Amsterdam, The Netherlands. Requests for copies of SMS can be made through your local Shell Chemicals company.

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 T 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 www.shell.com/chemicals.

#### Storage Handling

Provided proper storage and handling precautions are taken we would expect ShellSol T to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Safety Data Sheet on <a href="https://www.shell.com/chemicals">www.shell.com/chemicals</a>.

#### Trademark

ShellSol is a Shell trademark.

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118 ShellSol T