# **Shell Chemicals**



Technical Datasheet

# SBP 100/140

Product Code Q5811

Region Europe

Product Category Special Boiling Point Solvents

CAS Registry Number 64742-49-0

EINECS Number 265-151-9

Description SBP 100/140 is a C7-C9 hydrocarbon solvent. Being made from

hydrogenated feedstock, its aromatics and olefins content is very low.

## **Typical Properties**

Property	Unit	Method	Value
Water	% m/m	ASTM D1364	< 0.005
Density @15°C	kg/L	ASTM D4052	0.732
Coefficient of Cubic Expansion @20°C	10 <sup>-4</sup> /°C	Calculated	12
Refractive Index @20°C	-	ASTM D1218	1.406
Colour	Saybolt	ASTM D156	+30
Bromine Index	mg Br/100g	ASTM D1492	< 5
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 D1078	106
Distillation, Dry Point	°C	ASTM D1078	136
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	1.9
Relative Evaporation Rate (Ether=1)	-	DIN 53170	6
Antoine Constant A #	kPa, °C	-	7.51210
Antoine Constant B #	kPa, °C	-	2541.50
Antoine Constant C #	kPa, °C	-	349.980
Antoine Constants: Temperature range	°C	-	+40 to +105

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Vapor Pressure @ 0°C	kPa	Calculated	1.8
Vapor Pressure @ 20°C	kPa	Calculated	4.4
Saturated Vapor Concentration @ 20°C	g/m³	Calculated	198
Paraffins	% m/m	GC	60
Naphthenes	% m/m	GC	40
Aromatics	mg/kg	SMS 2728	< 5
Benzene	mg/kg	GC	< 3
n-Hexane	%m/m	GC	< 0.1
Sulfur	mg/kg	ISO 20846	< 0.5
Flash Point, (Abel)	°C	IP170	1
Lower Explosion Limit in Air	% v/v		0.9
Upper Explosion Limit in Air	% v/v		6.8
Auto Ignition Temperature	°C	ASTM E659	310
Electrical Conductivity @ 20°C	pS/m	ASTM D4308	< 1
Dielectric Constant @ 20°C	-	-	2.0
Aniline Point	°C	ASTM D611	63
Kauri-Butanol Value	-	ASTM D1133	33
Pour Point	°C	ASTM D97	< -50
Viscosity @ 25°C	mm <sup>2</sup> /s	ASTM D445	0.72
Surface Tension @20°C	mN/m	Du Nouy ring	22
Thermal Conductivity @ 20°C	W/m/°C		0.13
Hildebrand Solubility Parameter	(cal/cm <sup>3</sup> ) <sup>1/2</sup>	-	7.5
Hydrogen Bonding Index	-	-	0
Fractional Polarity	-	-	0
Heat of Vaporization at T <sub>boil</sub>	kJ/kg	-	300
Heat of Combustion (Net) @t 25°C	kJ/kg	-	45500
Specific Heat @ 20°C	kJ/kg/°C	-	2.1
Molecular Weight	g/mol	Calculated	110
100 1 . 1 . 4	5 (1 5 )	= 10 Cl	

<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:  $\log P = A - B/(T+C)$ 

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#### 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

SBP 100/140 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 SBP 100/140 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.

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