Shell Chemicals

Technical Datasheet

ShellSol A150 ND

Product Code	Q7497
Region	Europe
Product Category	Aromatic Solvents
CAS Registry Number	64742-94-5
EINECS Number	265-198-5
Description	ShellSol A150 ND is a C9-C10 aromatic hydrocarbon solvent with a naphthalene content below 1%m/m.

Typical Properties

Property	Unit	Method	Value
Density @15°C	kg/L	ASTM D4052	0.887
Coefficient of Cubic Expansion @20°C	10^{-4}/°C	Calculated	9
Refractive Index @20°C	-	ASTM D1218	1.508
Colour	Saybolt	ASTM D156	+30
Bromine Index	mg Br/100g	ASTM D1492	300
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	185
Distillation, Dry Point	°C	ASTM D86	198
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	0.06
Relative Evaporation Rate (Ether=1)	-	DIN 53170	150
Antoine Constant A #	kPa, °C	-	7.45653
Antoine Constant B #	kPa, °C	-	2459.76
Antoine Constant C #	kPa, °C	-	269.313
Antoine Constants: Temperature range	°C	-	+ 20 to +140
Vapor Pressure @ 0°C	kPa	Calculated	0.02

Vapor Pressure @ 20°C	kPa	Calculated	0.09
Saturated Vapor Concentration @ 20°C	g/m^3	Calculated	5
Aromatics	% m/m	GC	>99
Benzene	mg/kg	GC	< 3
Sulfur	mg/kg	ISO 20846	< 0.5
Flash Point	°C	ASTM D93	63
Lower Explosion Limit in Air	% v/v		0.6
Upper Explosion Limit in Air	% v/v		7.0
Auto Ignition Temperature	°C	ASTM E659	496
Electrical Conductivity @ 20°C	pS/m	ASTM D4308	< 10
Dielectric Constant @ 20°C	-	-	2.4
Aniline Point, Mixed	°C	ASTM D611	15
Kauri-Butanol Value	-	ASTM D1133	95
Freezing Point	°C	-	-25
Cloud Point	°C	ASTM D97	< -30
Pour Point	°C	ASTM D97	< -30
Viscosity @ 25°C	mm^2/s	ASTM D445	1.2
Surface Tension @ 20°C	mN/m	Du Nouy ring	30
Hildebrand Solubility Parameter	$(cal/cm^3)^{1/2}$	-	8.7
Hydrogen Bonding Index	-	-	5.3
Fractional Polarity	-	-	0.001
Heat of Vaporization at T_{boil}	kJ/kg	-	295
Heat of Combustion (Net) @t 25°C	kJ/kg	-	42000
Specific Heat @ 20°C	kJ/kg/°C	-	1.8
Thermal Conductivity @ 20°C	W/m/°C	-	0.13
Molecular Weight	g/mol	Calculated	130

(#) 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
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 A150 ND does not contain detectable quantities of heavy metals and 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 A150 ND 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.