Shell Chemicals

Data Sheet

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Product Name

Xylene S

Product Code **T1404** **Europe**

Product Category **Aromatics**

CAS Registry Number 1330-20-7

EINECS Number 215-535-7

Description Xylene S is a clear colourless aromatic hydrocarbon liquid of characteristic odour.

Typical Properties

Property	Unit	Method	Value
Density @15°C	kg/l	ASTM D4052	0.871
Cubic Expansion Coefficient @20°C	(10^-4)/°C	Calculated	10
Refractive Index @20°C	-	ASTM D1218	1.498
Color	Pt-Co	ASTM D1209	< 5
Distillation, IBP	°C	ASTM D1078	139
Distillation, DP	°C	ASTM D1078	142
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	0.70
Relative Evaporation Rate (Ether=1)	-	DIN 53170	15
Antoine Constant A #	kPa, °C	-	7.61800
Antoine Constant B #	kPa, °C	-	2739.24
Antoine Constant C #	kPa, °C	-	348.560
Antoine Constants: Temperature range	°C	-	+4 to +120
Vapor Pressure @0°C	kPa	Calculated	0.57
Vapor Pressure @20°C	kPa	Calculated	1.5
Saturated Vapor Concentration @20°C	g/m³	Calculated	67
Aromatics	% m/m	GC	> 99.5
Benzene	mg/kg	GC	< 100
Sulfur	mg/kg	SMS 1897	< 1
Flash Point	°C	IP 170	26
Auto Ignition Temperature	°C	ASTM E659	500
Explosion Limit: Lower	%v/v	-	1.0
Explosion Limit: Upper	%v/v	-	7.1
Electrical Conductivity @20°C	pS/m	-	< 10
Dielectric Constant @20°C	-	-	2.4
Aniline Point, Mixed	°C	ASTM D611	10

Kauri-Butanol Value	-	ASTM D1133	90
Pour Point	°C	-	< -30
Surface Tension @20°C	mN/m	Du Nouy ring	29
Viscosity @25°C	mm^2/s	ASTM D445	0.73
Hildebrand Solubility Parameter	$(cal/cm^3)^{\wedge}½$	-	8.85
Hydrogen Bonding Index	-	-	4.5
Fractional Polarity	-	-	0.001
Heat of Vaporization @Tboil	kJ/kg	-	340
Heat of Combustion (Net) @25°C	kJ/kg	-	41500
Specific Heat @20°C	kJ/kg/°C	-	1.7
Thermal Conductivity @20°C	W/m/°C	-	0.13
Molecular Weight	g/mol	Calculated	106

(#) 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.

Storage and Handling

Provided proper storage and handling precautions are taken we would expect Xylene S 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.

Hazard Information

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

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