Shell Chemicals



Technical Datasheet

Pentane Blend 75/25

Product Code Q1113

Region Europe

Product Category Pentanes

CAS Registry Number Mixture

EINECS Number Mixture

Description Pentane blend 75/25 is a very volatile hydrocarbon solvent, low in

odour and impurities.

Typical Properties

Property	Unit	Method	Value
Water	% m/m	ASTM D1364	< 0.005
Density @15°C	kg/L	ASTM D4052	0.630
Coefficient of Cubic Expansion @20°C	10 ⁻⁴ /°C	Calculated	16
Refractive Index @20°C	-	ASTM D1218	1.357
Colour	Saybolt	ASTM D156	+30
Bromine Index	mg Br/100g	ASTM D1492	50
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	33
Distillation, Dry Point	°C	ASTM D1078	36
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	13
Relative Evaporation Rate (Ether=1)	-	DIN 53170	< 1.0
Vapor Pressure @ 0°C	kPa	Calculated	29
Vapor Pressure @ 20°C	kPa	62	63
Saturated Vapor Concentration @ 20°C	g/m³	Calculated	1865
Paraffins	% m/m	GC	>99

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Naphthenes	% m/m	GC	< 1
Aromatics	mg/kg	SMS 2728	< 5
Benzene	mg/kg	GC	< 3
Toluene	mg/kg	GC	< 3
n-Hexane	%m/m	GC	< 0.1
Sulfur	mg/kg	ISO 20846	< 0.5
Flash Point, (Abel)	°C	IP170	< -50
Lower Explosion Limit in Air	% v/v		1.7
Upper Explosion Limit in Air	% v/v		7.8
Auto Ignition Temperature	°C	ASTM E659	421
Electrical Conductivity @ 20°C	pS/m	ASTM D4308	< 1
Dielectric Constant @ 20°C	-	-	1.8
Aniline Point	°C	ASTM D611	73
Kauri-Butanol Value	-	ASTM D1133	29
Pour Point	°C	ASTM D97	< -50
Viscosity @ 25°C	mm^2/s	ASTM D445	0.35
Surface Tension @20°C	mN/m	Du Nouy ring	16
Thermal Conductivity @ 20°C	W/m/°C		0.12
Hildebrand Solubility Parameter	(cal/cm ³) ^{1/2}	-	7.0
Hydrogen Bonding Index	-	-	0
Fractional Polarity	-	-	0
Heat of Vaporization at T _{boil}	kJ/kg	-	354
Heat of Combustion (Net) @t 25°C	kJ/kg	-	46000
Specific Heat @ 20°C	kJ/kg/°C	-	2.4
Molecular Weight	g/mol	Calculated	72

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.

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Quality

Pentane blend 75/25 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 Pentane blend 75/25 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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