Shell Chemicals



Technical Datasheet

Isohexane LNH

Product Code Q1215

Region Europe

Product Category Special Boiling Point Solvents

CAS Registry Number 64742-49-0

EINECS Number 265-151-9

Description Isohexane LNH is a narrow boiling range, C6 hydrocarbon solvent

with a n-hexane content of less than 3.5%. Being made from

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

Typical Properties

Property	Unit	Method	Value
Water	% m/m	ASTM D1364	< 0.01
Density @15°C	kg/L	ASTM D4052	0.662
Coefficient of Cubic Expansion @20°C	10 ⁻⁴ /°C	Calculated	14
Refractive Index @20°C	-	ASTM D1218	1.373
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	59
Distillation, Dry Point	°C	ASTM D1078	63
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	9.4
Relative Evaporation Rate (Ether=1)	-	DIN 53170	1.2
Antoine Constant A #	kPa, °C	-	7.68550
Antoine Constant B #	kPa, °C	-	2322.21
Antoine Constant C #	kPa, °C	-	349.110
Antoine Constants: Temperature range	°C	-	0 to + 55

15 Isohexane LNH

Vapor Pressure @ 0°C	kPa	Calculated	11
Vapor Pressure @ 20°C	kPa	Calculated	25
Saturated Vapor Concentration @ 20°C	g/m³	Calculated	875
Paraffins	% m/m	GC	97
Naphthenes	% m/m	GC	3
Aromatics	mg/kg	SMS 2728	< 5
Benzene	mg/kg	GC	< 3
n-Hexane	%m/m	GC	3
Sulfur	mg/kg	ISO 20846	< 0.5
Flash Point, (Abel)	°C	IP170	< -47
Lower Explosion Limit in Air	% v/v		1.0
Upper Explosion Limit in Air	% v/v		7.4
Auto Ignition Temperature	°C	ASTM E659	405
Electrical Conductivity @ 20°C	pS/m	ASTM D4308	< 1
Aniline Point	°C	ASTM D611	70
Kauri-Butanol Value	-	ASTM D1133	30
Pour Point	°C	ASTM D97	< -50
Viscosity @ 25°C	mm ² /s	ASTM D445	0.45
Surface Tension @20°C	mN/m	Du Nouy ring	17
Thermal Conductivity @ 20°C	W/m/°C		0.12
Hildebrand Solubility Parameter	(cal/cm ³) ^{1/2}	-	7.2
Hydrogen Bonding Index	-	-	0
Fractional Polarity	-	-	0
Heat of Vaporization at T _{boil}	kJ/kg	-	324
Heat of Combustion (Net) @t 25°C	kJ/kg	-	46000
Specific Heat @ 20°C	kJ/kg/°C	-	2.2
Molecular Weight	g/mol	Calculated	86

^(#) In the Antoine temperature range, the vapor pressure P (kPa) at temperature T (°C) can be calculated by means of the Antoine equation: $\log P = A - B/(T+C)$

15 Isohexane LNH

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

Isohexane LNH 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 Isohexane LNH 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.

All products purchased or supplied by Shell chemicals companies are subject to the terms and conditions set out in the contract, order confirmation and/or bill of lading. All other information supplied by Shell chemicals companies, including that herein, is considered accurate but is furnished upon the express condition that the customer shall make its own assessment to determine a product's suitability for a particular purpose. Except as may be set forth in the applicable contract, order confirmation and/or bill of lading, Shell chemicals companies make no warranty, express or implied, including regarding any information supplied or the data upon which it is based or the results to be obtained from the use of such products or information, or concerning product, whether of satisfactory quality, merchantability, fitness for any particular purpose or otherwise, or with respect to intellectual property infringement as a result of use of information or products, and none shall be implied.

The expression 'Shell Chemicals' refers to the companies of the Royal Dutch/Shell Group that are engaged in chemical businesses. Each of the companies that make up the Royal Dutch/Shell Group of companies is an independent entity and has its own separate identity.

15 Isohexane LNH April 2016