Shell Chemicals



Technical Datasheet

Hexane Extraction

Product Code Q1252

Region North America

Product Category Special Boiling Point Solvents

CAS Registry Number 64742-49-0

Description Hexane is a clear, colorless liquid with a faint odor. It is a stable

paraffinic hydrocarbon which is highly volatile and distills over a very

narrow range.

Typical Properties

Property	Unit	Method	Value
API Gravity	-	ASTM D4052	78.7
Specific Gravity @15.6°C/15.6°C [60°F/60°F]	-	ASTM D4052	0.673
Density @15.6°C [60°F]	kg/L	ASTM D4052	0.672
Density @15.6°C [60°F]	lb/gal	ASTM D4052	5.61
Density @15°C	kg/m³	ASTM D4052	672
Coefficient of Cubic Expansion @20°C [68°F]	10 ⁻⁴ /°C	Calculated	13
Refractive Index @20°C [68°F]	-	ASTM D1218	1.379
Color	Saybolt	ASTM D156	+30
Copper Corrosion (1hr @100°C)	-	ASTM D130	1a
Doctor Test	-	ASTM D235	Negative
Bromine Index	Mg Br/100g	ASTM2710	<5
Distillation, Initial Boiling Point	°C	ASTM D1078	66
Distillation, Initial Boiling Point	°F	ASTM D1078	150
Distillation, 50%v	°C	ASTM D1078	67
Distillation, 50%v	°F	ASTM D1078	152
Distillation, Dry Point	°C	ASTM D1078	69
Distillation, Dry Point	°F	ASTM D1078	156
Evaporation Time (nBuAc=470sec)	seconds	ASTM D3539	60

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Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	7.8
Vapor Pressure @20°C [68°F]	kPa	Calculated	19
Vapor Pressure @20°C [68°F]	mmHg	Calculated	140
Saturated Vapor Concentration @20°C [68°F]	g/m³	Calculated	671
Volatile Organic Compound (VOC)	g/L	EU / EPA	668
Paraffins	% m/m	GC	82
Naphthenes	% m/m	GC	18
Aromatics	% m/m	GC	< 0.005
Benzene	mg/kg	GC	< 1
n-Hexane	%m/m	GC	55
Sulfur	mg/kg	ISO 20846	<0.5
Flash Point, TCC	°C	ASTM D56	-30
Flash Point, TCC	°F	ASTM D56	-22
Lower Explosion Limit in Air	% v/v		1.1
Upper Explosion Limit in Air	% v/v		7.4
Auto Ignition Temperature	°C	ASTM E659	375
Electrical Conductivity @20°C [68°F]	pS/m	ASTM D4308	< 1
Aniline Point (M=Mixed)	°C	ASTM D611	66
Aniline Point (M=Mixed)	°F	ASTM D611	151
Kauri-Butanol Value	-	ASTM D1133	29
Pour Point	°C	ASTM D97	<-50
Pour Point	°F	ASTM D97	<-58
Hildebrand Solubility Parameter	$(cal/cm^3)^{1/2}$	-	7.3
Hydrogen Bonding Index	-	-	0.0
Fractional Polarity	-	-	0.0
Surface Tension @20°C [68°F]	mN/m	-	19
Viscosity @25°C [77°F]	cSt	ASTM D445	0.48
Molecular Weight	g/mol	Calculated	86

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

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

Hexane Extraction can be supplied to meet the requirements of FAO/WHO and MAFF specifications for extraction solvents.

Hexane Extraction 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 Hexane Extraction 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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