



Heptane

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| Product Code | Q1352 |
| Region | North America |
| Product Category | Special Boiling Point Solvents |
| CAS Registry Number | 64742-89-8 |

Description Heptane is a narrow-cut, fast evaporating hydrocarbon solvent. The narrow boiling range gives the solvent its typical well-regulated drying performance. The high degree of general refining results in a low level of impurities such as sulfur, olefins, benzene and total aromatics and also gives this solvent its low odor.

Typical Properties

| Property | Unit | Method | Value |
|---|----------------------|------------|----------|
| API Gravity | - | ASTM D4052 | 71.4 |
| Specific Gravity @15.6°C/15.6°C [60°F/60°F] | - | ASTM D4052 | 0.697 |
| Density @15.6°C [60°F] | kg/L | ASTM D4052 | 0.696 |
| Density @15.6°C [60°F] | lb/gal | ASTM D4052 | 5.81 |
| Density @15°C | kg/m ³ | ASTM D4052 | 697 |
| Coefficient of Cubic Expansion @20°C [68°F] | 10 ⁻⁴ /°C | Calculated | 13 |
| Refractive Index @20°C [68°F] | - | ASTM D1218 | 1.391 |
| Color | Saybolt | ASTM D156 | +30 |
| Copper Corrosion (1hr @100°C) | - | ASTM D130 | 1a |
| Doctor Test | - | ASTM D235 | Negative |
| Distillation, Initial Boiling Point | °C | ASTM D1078 | 93 |
| Distillation, Initial Boiling Point | °F | ASTM D1078 | 199 |
| Distillation, 50%v | °C | ASTM D1078 | 94 |
| Distillation, 50%v | °F | ASTM D1078 | 201 |
| Distillation, Dry Point | °C | ASTM D1078 | 100 |
| Distillation, Dry Point | °F | ASTM D1078 | 212 |
| Evaporation Time (nBuAc=470sec) | seconds | ASTM D3539 | 107 |

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| Relative Evaporation Rate (nBuAc=1) | - | ASTM D3539 | 4.4 |
| Vapor Pressure @20°C [68°F] | kPa | Calculated | 6.5 |
| Vapor Pressure @20°C [68°F] | mmHg | Calculated | 50 |
| Saturated Vapor Concentration @20°C [68°F] | g/m ³ | Calculated | 267 |
| Volatile Organic Compound (VOC) | g/L | EU / EPA | 692 |
| Paraffins | % m/m | GC | 85 |
| Naphthenes | % m/m | GC | 15 |
| Aromatics | % m/m | GC | < 0.05 |
| Benzene | mg/kg | GC | < 1 |
| n-Hexane | %m/m | GC | < 0.1 |
| Sulfur | mg/kg | ISO 20846 | <0.5 |
| Flash Point, TCC | °C | ASTM D56 | -7 |
| Flash Point, TCC | °F | ASTM D56 | 19 |
| Lower Explosion Limit in Air | % v/v | | 1.0 |
| Upper Explosion Limit in Air | % v/v | | 7.0 |
| Auto Ignition Temperature | °C | ASTM E659 | 215 |
| Electrical Conductivity @20°C [68°F] | pS/m | ASTM D4308 | < 1 |
| Aniline Point (M=Mixed) | °C | ASTM D611 | 67 |
| Aniline Point (M=Mixed) | °F | ASTM D611 | 153 |
| Kauri-Butanol Value | - | ASTM D1133 | 30 |
| 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 | - | 21 |
| Viscosity @25°C [77°F] | cSt | ASTM D445 | 0.57 |
| Molecular Weight | g/mol | Calculated | 100 |

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.

Quality

Heptane 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 Heptane 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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