

PENTANE

Product Number GC312-4
Packaged in 4L Glass Bottles

Specifications:

Water: Less than 0.01% by Karl Fischer titration
Refractive index: 1.3576 ± 0.0003 at 20°C
Residue: Less than one mg/L
Purity: Greater than 98% n-pentane and 99.9% n-pentane and saturated C₅ hydrocarbons by GC analysis
Electron capture GC: No residue peaks greater than 2 ng/L as lindane.
Flame ionization GC: No peaks greater than one ng/mL, having a retention time of toluene or greater, on a crossbonded 5% diphenyl/95% dimethyl polysiloxane capillary column for a splitless injection of a 1000-fold sample concentrate.

Physical Properties:

Molecular weight: 72.17
Boiling point: 36°C(96.8°F)@760mm Hg
Vapor pressure: 420 mm Hg@68°F(20°C)
Freezing point: -129.7°C(-201.5°F)
Refractive index: 1.3575 at 20°C
Density: 0.6262 g/mL (5.226 lb/gal) at 20°C
0.6214 g/mL (5.186 lb/gal) at 25°C
Dielectric constant: 1.84 at 20°C
Dipole moment: 0.00 D at 25°C
Solvent group: 0
Polarity index (P'): 0.0
Eluotropic value on alumina: 0.00
Viscosity: 0.23 cP at 20°C
Surface tension: 15.48 dyn/cm at 25°C
Solubility in water: 0.04% at 20°C(68°F)
Solubility of water in pentane: 0.009% at 20°C

Regulatory and Safety Data:

DOT hazard class: 3, Pkg Grp II, UN1265, Flammable liquid
Store in an area designed for flammable storage, or in an approved metal cabinet, away from direct sunlight, heat, and sources of ignition.
EPA applicable waste code(s): D001
Flash point: -56.2°F (-49°C) by closed cup
Lower explosive limit: 1.5%
Upper explosive limit: 7.8%
Threshold limit value: 600 ppm ACGIH

Refer to Material Safety Data Sheet for additional regulatory, health and safety information.

Suggested Applications:

For trace analysis at or below the part-per-billion level.