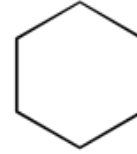


Identification

C_6H_{12}
 M = 84,16 g/mol
 CAS [110-82-7]
 EC number: 203-806-2
 Taric code: 2902 11 00


Synonyms

Hexahydrobenzene, Hexamethylene, Naphthene

Applications

solvents, analytical chemistry, synthesis of organic products.

Specifications

assay (G.C.)..... min. 99,9 %
 identity (IR-spectrum)..... passes test
 density (20°/4°)..... 0,776 - 0,780
 appearance..... clear
 colour (Hazen)..... max. 10
 acidity..... max. 0,0003 meq/g
 melting point..... min. 6,0 °C
 aluminium (Al)..... max. 0,1 ppm
 barium (Ba)..... max 0,01 ppm
 boron (B)..... max. 0,02 ppm
 cadmium (Cd)..... max 0,01 ppm
 calcium (Ca)..... max. 0,3 ppm
 chromium (Cr)..... max. 0,02 ppm
 cobalt (Co)..... max. 0,02 ppm
 copper (Cu)..... max. 0,02 ppm
 iron (Fe)..... max. 0,02 ppm
 lead (Pb)..... max. 0,1 ppm
 magnesium (Mg)..... max. 0,1 ppm
 manganese (Mn)..... max 0,01 ppm
 nickel (Ni)..... max. 0,02 ppm

tin (Sn)..... max. 0,1 ppm
 zinc (Zn)..... max 0,01 ppm
 aromatic hydrocarbons (as C6H6)..... max. 0,001 %
 cyclohexene (G.C.)..... max. 0,05 %
 ethanol (G.C.)..... max. 0,01 %
 substances darkened by H₂SO₄..... passes test
 residue on evaporation..... max. 0,0002 %
 water (K.F.)..... max. 0,01 %

liquid chromatography suitability absorbance..... passes test

min. transmission/max. absorbance in a 1,0 cm cell at
 wavelength:..... T(%) A (AU)
 208 nm..... 20 % 0,699 AU
 223 nm..... 50 % 0,301 AU
 232 nm..... 80 % 0,097 AU
 240 nm..... 90 % 0,046 AU
 250 nm..... 98 % 0,009 AU
 270 nm..... 99 % 0,004 AU

Microfiltered through membranes of pore diameter 0,22 µm

Physical data

- Density: 0,78 g/cm³
- Solub. in water: (20 °C): 55 mg/l
- Melting point: 6 °C
- Boiling point: 80,7 - 81 °C
- Flash point: -18 °C
- Ignition temperature: 260 °C
- Vapour pressure: (20 °C) 103 hPa
- Refraction index: (n 20 °C/D) 1,4264
- Viscosity: (kinetic, 20 °C) 1,26 mm²/s
- Dielectric const.: (20 °C) 2,0
- Evap. heat: (81 °C) 389 KJ/kg
- Saturation conc.: (20 °C) 357 g/m³
- Expl. limit (upper): 8,3 Vol%
- Expl. limit (lower): 1,2 Vol%

Safety - GHS

Signal Word: Danger

Hazard Statements:

H225: Highly flammable liquid and vapour.

H315: Causes skin irritation.

H336: May cause drowsiness or dizziness.

H304: May be fatal if swallowed and enters airways.

H410: Very toxic to aquatic life with long lasting effects.



Precautionary Statements:

P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P370+P378: In case of fire: Use ... for extinction.

P405: Store locked up.

P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Transport/storage

- ADR: 3 F1 II • UN 1145 • CYCLOHEXANE
- IMDG: 3 II • UN 1145 • CYCLOHEXANE
- IATA/ICAO: 3 II • UN 1145 • CYCLOHEXANE
- PAX: 305
- CAO: 307
- 15°C - 25°C