

CYCLOHEXANE

Prepared at the 23rd JECFA (1979), published in FNP 12 (1979) and in FNP 52 (1992). Metals and arsenic specifications revised at the 63rd JECFA (2004). No ADI was allocated at the 23rd JECFA (1979)

SYNONYMS

Hexahydrobenzene

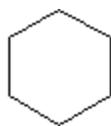
DEFINITION

Chemical names Cyclohexane

C.A.S. number 110-82-7

Chemical formula C_6H_{12}

Structural formula



Formula weight 84.16

Assay Not less than 99.5% w/w

DESCRIPTION

Colourless, clear, flammable liquid, with characteristic odour

FUNCTIONAL USES

Extraction solvent

CHARACTERISTICS

IDENTIFICATION

Solubility (Vol. 4) Insoluble in water; miscible with ethanol and ether

Specific gravity (Vol. 4) 0.776 - 0.780

PURITY

Distillation range (Vol. 4) 80° - 82°

Non-volatile residue (Vol. 4) Not more than 1 mg/100 ml

Sulphur (Vol. 4) Not more than 10 mg/kg

Benzene (Vol. 4) Not more than 0.1% v/v
Determine by the method *Aromatic Hydrocarbon Determination*

Polycyclic aromatic hydrocarbons (Vol. 4) The following absorbance limits per cm of optical path length shall not be exceeded:

wavelength (nm)	absorbance
280 - 289	0.15

290 - 299	0.12
300 - 359	0.08
360 - 400	0.02

Lead (Vol. 4)

Not more than 2 mg/kg

Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on the principles of the method described in Volume 4, "Instrumental Methods."

**METHOD OF
ASSAY**

Proceed as directed under the *Gas-liquid chromatographic method for Determination of Aromatic Hydrocarbons* (see Volume 4) and calculate the content by the method of area percentage (area normalization).