# SAFETY DATA SHEET



# **CYCLOHEXANE AR**

# 1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation:

Catalogue no. : KA719

Product name: Cyclohexane AR

Synonym: Hexahydrobenzene, Hexamethylene, Hexanaphtene

1.2 Use of the substance/preparation: For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm: Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169 Fax no. (61) 2 98997976

1.4 Emergency telephone: (61) 2 98998169 (9:00am - 5:00 pm) [ Office hours ]

### 2. Identification of dangers

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards: Specific Target Organ Toxicity - Single exposure - Narcotic effects - Category 3 - Warning (CLP: STOT SE 3) H336

Aspiration hazard - Category 1 - Danger (CLP : Asp. Tox. 1) H304<sup>a</sup> Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315

Physical hazards: Flammable liquids - Category 2 - Danger (CLP: Flam. Liq. 2) H225

Environmental hazards: Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (CLP: Aquatic Acute 1)

H400

Hazardous to the aquatic environment - Chronic hazard - Category 1 - Warning (CLP : Aquatic Chronic 1)

H410

Symbol(s) F Highly flammable

Xn Harmful

N Dangerous for the environment

R Phrase(s) R11 : Highly flammable.

R38: Irritating to skin.

R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R65: Harmful: may cause lung damage if swallowed. R67: Vapours may cause drowsiness and dizziness.

S Phrase(s) S2: Keep out of the reach of children.

S9: Keep container in a well-ventilated place.

S16: Keep away from sources of ignition - No smoking.

S25: Avoid contact with eyes.

S33: Take precautionary measures against static discharges.

S51: Use only in well-ventilated areas.

S60: This material and its container must be disposed of as hazardous waste.

S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

 ${\sf S62:} If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.$ 

Signal words : Danger Hazard pictograms



Hazard statements: H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

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

Precautionary statements:

General: P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

Prevention: P210: Keep away from heat, sparks, open flames or hot surfaces. – No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.

 ${\tt P261: Avoid \ breathing \ dust, fume, gas, mist, vapours, spray.}$ 

P264: Wash thoroughly after handling

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves, protective clothing, eye protection, face protection.

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

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing.

Rinse skin with water/shower.

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P332+P313: If skin irritation occurs : Get medical advice. P363: Wash contaminated clothing before reuse. P370+P378: In case of fire: Use for extinction.

P391: Collect spillage.

Storage: P403+P233: Store in well-ventilated place. Keep container tightly closed.

P403+P235: Store in well-ventilated place. Keep cool.

P405: Store locked up.

Disposal considerations: P501: Dispose of this material and its container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

### 3. Composition/information on ingredients

Substance / Preparation: Cyclohexane AR 100%

Formula: C<sub>6</sub>H<sub>12</sub>
CAS No : 110-82-7
EC No : 203-806-2

#### 4. First-aid measures

4.1 General indications: Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling: Take the person out into the fresh air. In the event of suffocation, proceed to provide artificial

respiration. Seek immediate medical assistance.

4.3 Contact with the skin: Wash with plenty of water. Remove contaminated clothing.

4.4 Eyes: Wash with plenty of water, keeping eyelids open. Seek immediate medical assistance.

4.5 Ingestion: Avoid vomiting. Seek immediate medical assistance.

# 5. Fire-fighting measures

- 5.1 Suitable fire-extinguishing means: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- 5.2 Fire-fighting means which must NOT be used: Running water.
- 5.3 Special risks: Highly flammable liquid and vapour. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level.
- 5.4 Protective equipment: Do not enter fire area without proper protective equipment, including respiratory protection.

### 6. Accidental release measures

- 6.1 Individual precautions: Do not inhale the fumes. Use personal protective equipment as required. Avoid sources of ignition.

  Do not smoke. Avoid contact with the skin, eyes or clothing. Ensure adequate ventilation.
- 6.2 Environmental precautions: Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.
- 6.3 Methods for collection/cleaning: Collect up with absorbent materials or, if none available, dry sand or earth and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

# 7. Handling and storage

- 7.1 Handling: Avoid the formation of electrostatic charges. Ensure good ventilation and renewal of the air in the premises. Avoid breathing dust, fume, gas, mist, vapours or spray. Avoid contact with the skin, eyes or clothing. Use personal protective equipment as required.
- 7.2 Storage: Keep only in the original container in a cool, well ventilated place. Keep in fireproof place. Ground/bond container and receiving equipment. Keep container tightly closed.

# 8. Exposure controls/personal protection

- 8.1 Technical protective measures: Ensure good ventilation and renewal of the air in the premises.
- 8.2 Exposure limit control: No data available.
- 8.3 Respiratory protection: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
- 8.4 Hand protection: Use suitable gloves
- 8.5 Eye protection: Use suitable goggles.

### 9. Physical and chemical properties

Appearance: liquid.

Colour: Colourless.

Odour: Characteristic.
pH value: No data available.

Melting Point: 4-7 °C
Boiling Point: 80.7 °C
Flash point: -18 °C

Flammability (solid, gas): Highly flammable liquid and vapour. Flammable.

Evaporation rate: 2.6

Vapour pressure: 102.7 hPa at 20 °C
Vapour density: No data available.
Solubility: Insoluble with water.

Density: 0.779

Relative density, gas (air=1): No data available. Relative density, liquid (water=1): No data available. Viscosity @ at 40°C [mm2/s]: No data available.

# 10. Stability and reactivity

10.1 Conditions which should be avoided: High temperatures. Direct sunlight. Humidity.

10.2 Matter which should be avoided: Strong oxidant agents.

10.3 Hazardous decomposition products: Carbon monoxide. Carbon dioxide. May release flammable gases

10.4 Complementary information: The product is chemically stable under standar ambient conditions (room temperature).

#### 11. Toxicological information

11.1 Acute toxicity: Inhalation: May be fatal if swallowed and enters airways.

Dermal: Based on available data, the classification criteria are not met.

 $\label{lower loss} \mbox{Ingestion: May be fatal if swallowed and enters airways.}$ 

11.2 Corrosion : Based on available data, the classification criteria are not met.

11.3 Irritation : Causes skin irritation.

11.4 Sensitization: Based on available data, the classification criteria are not met.
 11.5 Mutagenicity: Based on available data, the classification criteria are not met.
 11.6 Carcinogenicity: Based on available data, the classification criteria are not met.
 11.7 Toxic for reproduction: Based on available data, the classification criteria are not met.

11.7 TOXIC for reproduction : Based on available data, the classification criteria

 ${\bf 11.8~STOT\text{-}single~exposure: May~cause~drowsiness~or~dizziness.}$ 

 ${\bf 11.9\,STOT\text{-}repeated\,exposure:Based\,on\,available\,data,the\,classification\,criteria\,are\,not\,met.}$ 

11.10 Aspiration hazard: May be fatal if swallowed and enters airways.

### 12. Ecological information

12.1 Toxicity: Very toxic to aquatic life with long lasting effects.

12.2 Persistence and Degradability: May cause long-term adverse effects in the environment.

12.3 Bioaccumulative potential: Not established.12.4 Mobility in soil: Not established.

12.5 Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6 Other possible effects on the environment: Avoid release to the environment.

# 13. Disposal considerations

Disposal considerations: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation.

Contaminated containers: Contaminated containers and packaging of dangerous substances or preparations must be treated in

the same manner as the actual products contained in them.

### 14. Transport information

14.1 Overland (ADR):

Technical name: CYCLOHEXANE

UN 1145 Class: 3 PELIG.M.AMB Packaging group: II (D/E)

14.2 By sea (IMDG):

Technical name: CYCLOHEXANE

UN 1145 Class: 3 PELIG.M.AMB Packaging group: II

14.3 By air (ICAI-IATA):

Technical name: CYCLOHEXANE

UN 1145 Class: 3 PELIG.M.AMB Packaging group: II

Packaging instructions: CAO 364 PAX 353

15. Regulatory information

5.1 Regulatory Information: Ensure all national/local regulations are observed.

5.2 Poisons Schedule: Not Scheduled.

16. Other Information

Abbreviations and acronyms: PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative.

Sources of key data used: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008

on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and

1999/45/EC, and amending Regulation (EC) No 1907/2006

Review number and date: v. 1.0
Date published: 1-Jun-2016
Further information : None.

In accordance with REACH Regulation (CE) № 1907/2006 and with CLP Regulation (CE) № 1272/2008

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