

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| | |
|------------------------|--|
| Product form | : Substance |
| Trade name | : Cyclohexane |
| Chemical / IUPAC name | : Cyclohexane |
| EC index no | : 601-017-00-1 |
| EC no | : 203-806-2 |
| CAS No. | : 110-82-7 |
| REACH registration No. | : n/a |
| Product code | : Class 3 |
| Formula | : C6H12 |
| Synonyms | : Hexahydroxylbenzene; / hexahydroxylbenzol; / hexanaphtene; / hexamethylene |

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/preparation : Manufacturer

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier (Only Representative):
 Braskem Netherland BV
 Weena 238-240, 9th Floor, Tower C
 NL - 3012 NJ – Rotterdam

Manufacturer:

BRASKEM S/A UNIB 3-RS
 Rua da União, 765 – Jardim Sônia Maria – Mauá/SP – Brazil
 Cep. 09380-900

Productsafety@braskem.com

1.4. Emergency telephone number

Emergency number : +31 10 205 2945 (business hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| | |
|-------------------|------|
| Flam. Liq. 2 | H225 |
| Skin Irrit. 2 | H315 |
| STOT SE 3 | H336 |
| Asp. Tox. 1 | H304 |
| Aquatic Acute 1 | H400 |
| Aquatic Chronic 1 | H410 |

Full text of H-phrases: see section 16.

Adverse physicochemical, human health and environmental effects

Highly flammable. Process vapours can irritate airways, skin and eyes. Irritating to the skin and mucous membranes. Depression of the central nervous system. May cause skin irritation / dermatitis. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

GHS08

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour

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According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| | |
|--------------------------------|--|
| Precautionary statements (CLP) | : 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 P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking. P233 - Keep container tightly closed P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment. P261 - Avoid breathing fume, mist, spray, vapours, gas. 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. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor P302+P352 - IF ON SKIN: Wash with plenty of soap and water P304+P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing P312 - Call a POISON CENTER/doctor/physician if you feel unwell P331 - Do NOT induce vomiting P332+P313 - If skin irritation occurs: Get medical advice/attention P391 - Collect spillage P403+P233 - Store in a well-ventilated place. Keep container tightly closed P403+P235 - Store in a cool and well-ventilated place. P405 - Store locked up |
|--------------------------------|--|

2.3. Other hazards

| | |
|---|---|
| other hazards which do not result in classification | : Exposure to high concentrations may lead to liver and kidney damage and heart muscle degeneration. May have a narcotic effect at high concentrations. Do not allow the product to be released into the environment. Attacks some forms of plastics, rubber, and coatings. |
|---|---|

SECTION 3: Composition/information on ingredients

3.1. Substances

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|-----------------------------------|---|-------|---|
| Cyclohexane (Main constituent) | (CAS No.) 110-82-7 (EC no) 203-806-2 (EC index no) 601-017-00-1 (REACH-no) n/a | < 100 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

Full text of R-, H- and EUH-phrases: see section 16.

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|---|
| First-aid measures general | : Do not induce vomiting. Immediately get medical attention. |
| First-aid measures after inhalation | : Evacuate personnel to a safe area. Remove casualty to fresh air and keep warm and at rest. If breathing is difficult, give oxygen. Seek medical attention immediately. |
| First-aid measures after skin contact | : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Obtain medical attention if irritation persists. |
| First-aid measures after eye contact | : Rinse immediately and plentifully with water, also under the eyelids, for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists. |
| First-aid measures after ingestion | : Give 2 to 3 spoons of food oil. Do NOT induce vomiting. Seek medical attention immediately. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|--------------------------------------|--|
| Symptoms/injuries after inhalation | : Irritation of respiratory tract. Excessive concentrations may cause nervous system depression, headache, and weakness leading to unconsciousness. May have a narcotic effect at high concentrations. |
| Symptoms/injuries after skin contact | : Causes skin irritation. Drying up of the skin. Dermatitis. |
| Symptoms/injuries after eye contact | : May cause irritation to the eyes. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Exposure to high concentrations may lead to liver and kidney damage and heart muscle degeneration.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|-------------------------------|---|
| Suitable extinguishing media: | : carbon dioxide (CO ₂), dry chemical powder, foam. |
|-------------------------------|---|

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Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread. Cool containers / tanks with spray water if possible.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable. Keep away from sources of ignition - No smoking. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

Explosion hazard : Oxidizing agents. No flames, No sparks. Eliminate all sources of ignition. May form flammable/explosive vapour-air mixture. Heavier than air, vapours may travel long distances along ground, ignite and flash back to source.

5.3. Advice for firefighters

Firefighting instructions : Cool containers / tanks with spray water if possible.

Protective equipment for firefighters : Exposure controls / Personal protection equipment. In case of fire: Wear self-contained breathing apparatus. Refer to section 8.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Complete protective clothing. In case of fire: Wear self-contained breathing apparatus. Refer to section 8.

Emergency procedures : Evacuate unnecessary personnel. When leaks or spills occur, only properly protected personnel should remain in the area. No smoking.

6.1.2. For emergency responders

Protective equipment : Complete protective clothing. In case of fire: Wear self-contained breathing apparatus. Refer to section 8.

Emergency procedures : No flames, No sparks. Eliminate all sources of ignition. Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid discharge to the environment. Do not allow uncontrolled leakage of product into the environment. Do not allow run-off from fire fighting to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Only use anti-static equipped (spark-free) tools. Use appropriate container to avoid environmental contamination. Keep container tightly closed and in a well-ventilated place. Comply with applicable regulations for solid waste disposal.

Other information : Do not allow uncontrolled leakage of product into the environment. Do not allow run-off from fire fighting to enter drains or water courses.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only in well-ventilated areas. In case of insufficient ventilation, wear suitable respiratory equipment. Containers must be properly grounded before beginning transfer. Use only non-sparking tools. Handle in accordance with good industrial hygiene and safety procedures. Do not smoke.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: : Avoid static electricity discharges. Ground equipment electrically. Store in dry, cool, well-ventilated area. Use explosion-proof ventilating equipment. Use grounded electrical/mechanical equipment. Keep away from open flames, hot surfaces and sources of ignition. Do not store near oxidizing agents or acidic material.

Storage condition(s) : Store in tightly closed, properly ventilated containers away from heat, sparks, open flame.

Incompatible materials : Strong oxidizing agents. Strong acid. Bases.

Storage area : Keep away from open flames, hot surfaces and sources of ignition. No smoking. Store in dry, cool, well-ventilated area. Store in tightly closed, leak-proof containers.

Special rules on packaging : Bulk transportation shall use a truck with stainless steel or carbon steel tank.

Packaging materials : carbon steel. stainless steel. Glass. Teflon. Viton. Avoid : polypropylene.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Cyclohexane (110-82-7) | | |
|------------------------------|---|---|
| EU | IOELV TWA (mg/m ³) | 700 mg/m ³ |
| EU | IOELV TWA (ppm) | 200 ppm |
| Austria | MAK (mg/m ³) | 700 mg/m ³ |
| Austria | MAK (ppm) | 200 ppm |
| Austria | MAK Short time value (mg/m ³) | 2800 mg/m ³ |
| Austria | MAK Short time value (ppm) | 800 ppm |
| Belgium | Limit value (mg/m ³) | 700 mg/m ³ |
| Belgium | Limit value (ppm) | 200 ppm |
| France | VLE (mg/m ³) | 1300 mg/m ³ |
| France | VLE (ppm) | 375 ppm |
| France | VME (mg/m ³) | 1050 mg/m ³ |
| France | VME (ppm) | 300 ppm |
| Germany | TRGS 900 Occupational exposure limit value (mg/m ³) | 700 mg/m ³ |
| Germany | TRGS 900 Occupational exposure limit value (ppm) | 200 ppm |
| Germany | TRGS 903 (BGW) | 170 mg/g Kreatinin |
| Germany | Remark (TRGS 903) | Gesamt-1,2-Cyclohexandiol (Urin; bei Langzeitexposition/Expositionsende bzw. Schichtende) |
| Italy - Portugal - USA ACGIH | ACGIH TWA (mg/m ³) | 350 mg/m ³ |
| Italy - Portugal - USA ACGIH | ACGIH TWA (ppm) | 100 ppm |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 1050 mg/m ³ |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 300 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 1050 mg/m ³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 300 ppm |
| Spain | VLA-ED (mg/m ³) | 700 mg/m ³ |
| Spain | VLA-ED (ppm) | 200 ppm |
| Switzerland | VLE (mg/m ³) | 2800 mg/m ³ |
| Switzerland | VLE (ppm) | 800 ppm |
| Switzerland | VME (mg/m ³) | 700 mg/m ³ |
| Switzerland | VME (ppm) | 200 ppm |
| Switzerland | Remark (CH) | max. 4x15 min/8h |
| The Netherlands | MAC TGG 8H (mg/m ³) | 700 mg/m ³ |
| The Netherlands | MAC TGG 15MIN (mg/m ³) | 1400 mg/m ³ |
| United Kingdom | WEL TWA (mg/m ³) | 350 mg/m ³ |
| United Kingdom | WEL TWA (ppm) | 100 ppm |
| United Kingdom | WEL STEL (mg/m ³) | 1050 mg/m ³ |
| United Kingdom | WEL STEL (ppm) | 300 ppm |
| Czech Republic | Expoziční limity (PEL) (mg/m ³) | 700 mg/m ³ |
| Czech Republic | Expoziční limity (PEL) (ppm) | 203 ppm |
| Czech Republic | Expoziční limity (NPK-P) (mg/m ³) | 2000 mg/m ³ |
| Czech Republic | Expoziční limity (NPK-P) (ppm) | 580 ppm |
| Denmark | Grænseværdie (langvarig) (mg/m ³) | 172 mg/m ³ |
| Denmark | Grænseværdie (langvarig) (ppm) | 50 ppm |
| Denmark | Grænseværdie (kortvarig) (mg/m ³) | 344 mg/m ³ |
| Denmark | Grænseværdie (kortvarig) (ppm) | 100 ppm |
| Finland | HTP-arvo (8h) (mg/m ³) | 350 mg/m ³ |
| Finland | HTP-arvo (8h) (ppm) | 100 ppm |
| Finland | HTP-arvo (15 min) | 875 mg/m ³ |
| Finland | HTP-arvo (15 min) (ppm) | 250 ppm |
| Hungary | AK-érték | 700 mg/m ³ |
| Hungary | MK-érték | 2800 mg/m ³ |
| Ireland | OEL (8 hours ref) (mg/m ³) | 340 mg/m ³ |

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| Cyclohexane (110-82-7) | | |
|------------------------|--|------------------------|
| Ireland | OEL (8 hours ref) (ppm) | 100 ppm |
| Ireland | OEL (15 min ref) (mg/m ³) | 1030 mg/m ³ |
| Ireland | OEL (15 min ref) (ppm) | 300 ppm |
| Ireland | Notes (IE) | IOELV |
| Lithuania | IPRV (mg/m ³) | 1000 mg/m ³ |
| Lithuania | IPRV (ppm) | 300 ppm |
| Lithuania | TPRV (mg/m ³) | 1300 mg/m ³ |
| Lithuania | TPRV (ppm) | 370 ppm |
| Norway | Gjennomsnittsverdier (AN) (mg/m ³) | 525 mg/m ³ |
| Norway | Gjennomsnittsverdier (AN) (ppm) | 150 ppm |
| Poland | NDS (mg/m ³) | 300 mg/m ³ |
| Poland | NDSCh (mg/m ³) | 1000 mg/m ³ |
| Slovakia | NPHV (priemerná) (mg/m ³) | 700 mg/m ³ |
| Slovakia | NPHV (priemerná) (ppm) | 200 ppm |
| Canada (Quebec) | VEMP (mg/m ³) | 1030 mg/m ³ |
| Canada (Quebec) | VEMP (ppm) | 300 ppm |
| Australia | TWA (mg/m ³) | 350 mg/m ³ |
| Australia | TWA (ppm) | 100 ppm |
| Australia | STEL (mg/m ³) | 1050 mg/m ³ |
| Australia | STEL (ppm) | 300 ppm |

| Cyclohexane (110-82-7) | |
|--|----------------------------|
| DNEL/DMEL (Workers) | |
| Acute - systemic effects, inhalation | 700 mg/m ³ |
| Acute - local effects, inhalation | 700 mg/m ³ |
| Long-term - systemic effects, dermal | 2016 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 700 mg/m ³ /day |
| Long-term - local effects, inhalation | 700 mg/m ³ /day |
| DNEL/DMEL (General population) | |
| Acute - systemic effects, inhalation | 412 mg/m ³ |
| Acute - local effects, inhalation | 412 mg/m ³ |
| Long-term - systemic effects, oral | 59.4 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 206 mg/m ³ /day |
| Long-term - systemic effects, dermal | 1186 mg/kg bodyweight/day |
| Long-term - local effects, inhalation | 206 mg/m ³ /day |
| PNEC (Water) | |
| PNEC aqua (freshwater) | 0.207 mg/l |
| PNEC aqua (marine water) | 0.207 mg/l |
| PNEC aqua (intermittent, freshwater) | 0.207 mg/l |
| PNEC aqua (intermittent, marine water) | 0.207 mg/l |
| PNEC (Sediment) | |
| PNEC sediment (freshwater) | 3.627 mg/kg dwt |
| PNEC sediment (marine water) | 3.627 mg/kg dwt |
| PNEC (Soil) | |
| PNEC soil | 2.99 mg/kg dwt |
| PNEC (Oral) | |
| PNEC oral (secondary poisoning) | Not applicable kg/kg food |
| PNEC (STP) | |
| PNEC sewage treatment plant | 3.24 mg/l |

8.2. Exposure controls

Appropriate engineering controls

: Use only in well-ventilated areas. Use explosion-proof electrical equipment. Use explosion-proof lighting equipment. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Contact lenses should not be worn.

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Personal protective equipment : Protective clothing. Protective goggles. An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits. Gas mask.



Materials for protective clothing : anti-static clothing in natural material or heat resistant synthetic material.
Hand protection : Wear suitable gloves resistant to chemical penetration. Use neoprene or rubber gloves. Protective gloves of PVC.
Eye protection : Chemical goggles or safety glasses. Wear face protection.
Skin and body protection : Chemical resistant suit. Boots. PVC (Polyvinyl chloride).
Respiratory protection : An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits.
Thermal hazard protection : Protective non-flammable clothing.
Environmental exposure controls : Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Do not allow run-off from fire fighting to enter drains or water courses. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Colourless
odour : Solvent like.
Odour threshold : No data available
pH : not applicable
Melting point : 7 °C
Solidification point : No data available
Boiling point : 81 °C
Flash point : -20 °C
Relative evaporation rate (butylacetate=1) : 100%
Flammability (solid, gas) : No data available
Explosive limits : 1.3 - 8.4 vol %
Vapour pressure : 95 hPa (20°C)
Relative vapour density : 2,9
Relative density : 0,775 – 0,785 (water = 1) @ 20°C
Density : No data available
Solubility : insoluble in water. Soluble in : Acetone.
Log Pow : 3.44
Log Kow : No data available
Self ignition temperature : 245 °C
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable at room temperature. The product is stable at normal handling- and storage conditions. Keep container tightly closed and dry.

10.3. Possibility of hazardous reactions

No polymerization . Hazardous polymerization may occur if exposure to fire conditions.

10.4. Conditions to avoid

Avoid ignition sources.

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10.5. Incompatible materials

Strong oxidizing agents. Strong acid. Bases.

10.6. Hazardous decomposition products

Carbon monoxide. Oxidizing agents.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

| Cyclohexane (110-82-7) | |
|---------------------------|--------------|
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 inhalation rat (ppm) | > 9500 ppm |

Skin corrosion/irritation : Causes skin irritation.

pH: not applicable

Serious eye damage/irritation : Not classified

pH: not applicable

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : Not classified

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

Potential Adverse human health effects and symptoms : Depression of the central nervous system. Repeated exposure may cause skin dryness or cracking. May cause skin irritation / dermatitis. In high concentrations may cause narcotic effects. Symptoms may include dizziness, headache, nausea and loss of co-ordination. Causes serious eye irritation. High concentrations may cause injuries to gastrointestinal tract, liver, kidneys and central nervous system.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Ecology - air : Photodegradation in the air.

| Cyclohexane (110-82-7) | |
|--------------------------------|--------------------|
| LC50 fishes 1 | 4.53 mg/l 96 hours |
| LC50 other aquatic organisms 1 | 4.425 mg/l |
| EC50 other aquatic organisms 1 | 0.9 mg/l |
| LC50 other aquatic organisms 2 | 0.9 mg/l |
| EC50 other aquatic organisms 2 | 4.425 mg/l |

12.2. Persistence and degradability

| Cyclohexane (110-82-7) | |
|-------------------------------|---------------------------|
| Persistence and degradability | Product is biodegradable. |

12.3. Bioaccumulative potential

| Cyclohexane (110-82-7) | |
|---------------------------|--|
| BCF fishes 1 | 167 mg/l |
| Log Pow | 3.44 at 20°C |
| Bioaccumulative potential | Product is biodegradable. Low bioaccumulation potential. |

12.4. Mobility in soil

| Cyclohexane (110-82-7) | |
|------------------------|---|
| Log Koc | 770 |
| Ecology - soil | May penetrate and reach the ground water. quick evaporation when in soil. |

12.5. Results of PBT and vPvB assessment

| Cyclohexane (110-82-7) | |
|---------------------------|----------------------------|
| Results of PBT assessment | Not considered as PBT/vPvB |

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12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container to an industrial incineration plant.
Waste disposal recommendations : Dispose of at authorized waste collection point. Dispose of this material and its container at hazardous or special waste collection point. Can be deposited in landfills, sent to an incineration or other appropriate means of disposal provided they meet the requirements of local laws. Collect in closed containers for disposal.

SECTION 14: Transport information

Classification for ROAD and RAIL transport: ADR/RID

14.1 UN Number : UN1145
14.2 Proper Shipping Name : CYCLOHEXANE
14.3 Class / Division : 3
14.4 Packing group : II
14.5 Environmental hazards : Product considered environmentally hazardous based on available data
14.6 Special precautions for user : Hazard identification number: 33

Classification for SEA transport: IMO - IMDG

14.1 UN Number : UN1145
14.2 Proper Shipping Name : CYCLOHEXANE
14.3 Class / Division : 3
14.4 Packing group : II
14.5 Environmental hazards : Product considered marine pollutant based on available data
14.6 Special precautions for user : No additional information available
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Product name : Cyclohexane

Classification for AIR transport: IATA - ICAO

14.1 UN Number : UN1145
14.2 Proper Shipping Name : CYCLOHEXANE
14.3 Class / Division : 3
14.4 Packing group : II
14.5 Environmental hazards : Product considered environmentally hazardous based on available data
14.6 Special precautions for user : No additional information available

This information does not intend to convey all specific regulatory or operational requirements/information relating to the product, therefore it cannot be considered exhaustive. Consult ADR, RID, IMO and ICAO regulations before transporting the product. It is responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No Annex XVII restrictions

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Sources of Key data : CSR - Chemical Safety Report. MSDS.

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Abbreviations and acronyms

: ACGIH (American Conference of Government Industrial Hygienists). ASTM - American Society for Testing and Materials . CAS (Chemical Abstracts Service) number. CLP - Classification, Labelling and Packaging. CSR - Chemical Safety Report. EC - European Community. GHS - Globally Harmonised System. Overland transport (ADR). PVC (Polyvinyl chloride). REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals. SDS - Safety Data Sheet.

Full text of R-, H- and EUH-phrases:

| | |
|-------------------|--|
| Aquatic Acute 1 | Hazardous to the aquatic environment - Acute Hazard Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment - Chronic Hazard Category 1 |
| Asp. Tox. 1 | Aspiration hazard Category 1 |
| Flam. Liq. 2 | flammable liquids Category 2 |
| Skin Irrit. 2 | skin corrosion/irritation Category 2 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| 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 |
| H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |
| 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. |

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.