```
1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
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Product name
                  Cyclopentylamine
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2. HAZARDS IDENTIFICATION
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Classification of the substance or mixture According to Regulation (EC) No1272/2008 Flammable liquids (Category 2) Acute toxicity, Inhalation (Category 4) Acute toxicity, Oral (Category 2)

Skin irritation (Category 2) Serious eye damage (Category 1) Skin sensitization (Category 1)

According to European Directive 67/548/EEC as amended. Highly flammable. Harmful by inhalation. Toxic if swallowed. Causes burns. May cause sensitization by skin contact.

Highly flammable liquid and vapour.

Wear protective gloves/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER or

Classification

H332

Concentration

Label elements

Pictogram

Signal word Danger Hazard statement(s)

H225 H300

Fatal if swallowed. H315 Causes skin irritation. May cause an allergic skin reaction. H317 H318 Causes serious eye damage.

H332 Harmful if inhaled. Precautionary statement(s) P210

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P264 Wash hands thoroughly after handling.

P280 P301 + P310

doctor/physician. P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazard symbol(s)

F Highly flammable T **Toxic**

R-phrase(s) R11 R20

Highly flammable. Harmful by inhalation. Toxic if swallowed.

R25

Synonyms

CAS-No.

Cyclope ntylamine

4. FIRST AID MEASURES

General advice

R34 Causes burns. R43 May cause sensitization by skin contact. S-phrase(s) Keep away from sources of ignition - No smoking. S16 In case of contact with eyes, rinse immediately with plenty of water and S26

seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. S36/37/39 In case of accident or if you feel unwell, seek medical advice immediately

S45

Other hazards - none 3. COMPOSITION/INFORMATION ON INGREDIENTS

Aminocyclopentane

(show the label where possible).

C5H11N Formula Molecular Weight 85,15 g/mol

EC-No.

1003-03-8 213-697-3 Flam. Liq. 2; Acute Tox. 4; Acute Tox. 2; Skin Irrit. 2; Eye Dam. 1; Skin Sens. 1; H225, H300, H315, H317, H318,

F, T, R11 - R20 - R25 - R34 -R43 For the full text of the H-Statements mentioned in this Section, see Section 16.

Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician. In case of skin contact Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a

physician. In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

If swallowed

5. FIRE-FIGHTING MEASURES Suitable extinguishing media For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires,

apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray;

solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section

6. ACCIDENTAL RELEASE MEASURES **Personal precautions**

Use water spray to cool unopened containers.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

explosive concentrations. Vapours can accumulate in low areas.

Methods and materials for containment and cleaning up

opened must be carefully resealed and kept upright to prevent leakage.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

13). 7. HANDLING AND STORAGE

Conditions for safe storage

charge.

Further information

Precautions for safe handling Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are

8. EXPOSURE CONTROLS/PERSONAL PROTECTION Personal protective equipment **Respiratory protection** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with

multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the

Eye protection Tightly fitting safety goggles. Faceshield (8-inch minimum).

standard EN 374 derived from it.

standards such as NIOSH (US) or CEN (EU).

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Hygiene measures

9. PHYSICAL AND CHEMICAL PROPERTIES

product.

Safety data

рΗ

Skin and body protection

Hand protection

Handle with gloves.

Appearance clear, liquid Form Colour light yellow

no data available

no data available

106 - 108 °C - lit.

13 °C - closed cup

260 °C

1,3 %(V)

9,4 %(V)

log Pow: 1,14

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the

Boiling point Flash point Ignition temperature

Lower explosion limit

Upper explosion limit

Partition coefficient:

n-octanol/water

Melting point

Density 0,863 g/cm3 at 25 °C Water solubility soluble

Relative vapour 2,94 density - (Air = 1.0)10. STABILITY AND REACTIVITY Chemical stability Stable under recommended storage conditions. Conditions to avoid Heat, flames and sparks. Materials to avoid Strong oxidizing agentsacids, Acid chlorides, Acid anhydrides, Strong oxidizing agents, Carbon dioxide (CO2) Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Specific target organ toxicity - single exposure

Specific target organ toxicity - repeated exposure

11. TOXICOLOGICAL INFORMATION

Serious eye damage/eye irritation

Respiratory or skin sensitization

May cause allergic skin reaction.

Germ cell mutagenicity

Reproductive toxicity

LD50 Oral - rat - 26 mg/kg

Skin corrosion/irritation

no data available

Aspiration hazard no data available

Inhalation

Potential health effects

membranes and upper respiratory tract. Ingestion Toxic if swallowed. Causes burns. Skin May be harmful if absorbed through skin. Causes skin burns. Causes eye burns. Eyes Signs and Symptoms of Exposure Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea **Additional Information** RTECS: GY8452000

12. ECOLOGICAL INFORMATION

Toxicity to fish

Toxicity to daphnia and other aquatic invertebrates.

Toxicity to algae

no data available

Mobility in soil no data available

no data available

no data available

Other adverse effects

Contaminated packaging Dispose of as unused product.

14. TRANSPORT INFORMATION

UN-Number: 3286 Class: 3 (6.1, 8)

UN-Number: 3286 Class: 3 (6.1, 8)

PBT and vPvB assessment

Toxicity

Persistence and degradability no data available **Bioaccumulative** potential

LC50 - other fish - 100 - 250 mg/l - 96 h

EC50 - Daphnia magna (Water flea) - 52,8 mg/l - 48 h

Packing group: II

Packing group: II

Packing group: II

EC50 - Desmodesmus subspicatus (green algae) - 61,6 mg/l - 96 h

Harmful if inhaled. Material is extremely destructive to the tissue of the mucous

13. DISPOSAL CONSIDERATIONS **Product** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Marine pollutant: No **IATA** UN-Number: 3286 Class: 3 (6.1, 8) Proper shipping name: Flammable liquid, toxic, corrosive, n.o.s. (Cyclopentylamine)

Acute Tox.

Eye Dam.

Flam. Liq.

H225

H300

Skin Irrit.

F

T

R11 R20

R25

R34

R43

Skin Sens.

ADR/RID

IMDG

15. REGULATORY INFORMATION This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Highly flammable liquid and vapour.

WARRANTY:

Proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Cyclopentylamine)

Proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Cyclopentylamine)

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. Harmful if inhaled. H332

16. OTHER INFORMATION Text of H-code(s) and R-phrase(s) mentioned in Section 3

Acute toxicity

Serious eye damage Flammable liquids

Fatal if swallowed.

Skin irritation

Toxic

Skin sensitization

Highly flammable

Highly flammable. Harmful by inhalation. Toxic if swallowed. Causes burns. May cause sensitization by skin contact. **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be

EMS-No: F-E, S-C

For R&D use only. Not for drug, household or other uses.