## SECTION 1. Identification of the substance/mixture and of the company/undertaking

**1.1 Product identifier**

**Trade name:**

3-(Cyclohexylamino)-2-hydroxy-1-propanesulfonic acid

**Synonyms:**

CAPSO

**CAS Number:**

73463-39-5

**1.2 Relevant identified uses of the substance or mixture and uses advised against Industrial and professional uses only.**

Laboratory chemicals, Synthesis of substances

**1.3 Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:**

TAIWAN HOPAX CHEMS. MFG. CO., LTD.
No. 28 Hua Dong Rd., Daliao Dist., Kaohsiung City 831134
TAIWAN-ROC

**Further information obtainable from:**

samantha@hopax.com.tw

**1.4 Emergency telephone number:**

Manufacturer:
HOPAX Fine Chemicals:
+886-7-7887600 Ext314 / +886-7-7872892

## SECTION 2. Hazards Identification

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Not a hazardous substance or mixture

**2.2 Label elements**

**Hazard pictograms**

Not applicable

**Signal word**

Not applicable

**Hazard statements**

May cause eye irritation.
May cause skin irritation...

**Precautionary statements：**

Do not eat, drink or use tobacco when using this product.
Wear respiratory protection, protective gloves and eye/face protection.
Use only in a well-ventilated area.
Wash thoroughly after handling.

**2.3 Other hazards**

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.
**vPvB:** Not applicable.

## SECTION 3. Composition / Information on ingredients

**3.1 Substances**

**Chinese and English name：** 3-(Cyclohexylamino)-2-hydroxy-1-propanesulfonic acid /3-環己胺基-2-羥基丙磺酸

**Formula :** $C_9H_{19}NO_4S$

**Molecular weight :** 237.32 g/mol

**CAS-No. :** 73463-39-5

**The hazardous ingredient (% of the content):** - %

## SECTION 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**

Show this material safety data sheet to the doctor in attendance.

**If inhaled**

After inhalation: fresh air.

**In case of skin contact**

In case of skin contact: Take off immediately all contaminated clothing.
Rinse skin with water/ shower.

**In case of eye contact**

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.
Remove contact lenses.

**If swallowed**

After swallowing: immediately make victim drink water (two glasses at most).
Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## SECTION 5. FIRE FIGHTING MEASURES

**5.1 Extinguishing media**

**suitable extinguishing media**

Water Foam Carbon dioxide (CO2) Dry powder.

**5.2 Special hazards arising from the substance or mixture**

Carbon oxides
Nitrogen oxides (NOx)
Sulfur oxides
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

**5.3 Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus.

**5.4Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.
Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

**6.2 Environmental precautions:**

Do not let product enter drains.

**6.3 Methods and material for containment and cleaning up:**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

**6.4 Reference to other sections**

For disposal see section 13.

## SECTION 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**

For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage conditions**

Store in original, properly-sealed container in ambient conditions for temperature and humidity.
Avoid exposure of material to direct sunlight. Isolate from any source of heat or ignition.

**Storage class**

Storage class (TRGS 510): 11: Combustible Solids

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**8.1 Control parameters**

**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Appropriate engineering controls**

Change contaminated clothing. Wash hands after working with substance.

**Personal protective equipment:**

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

**Skin protection**

This recommendation applies only to the product stated in the safety data sheet,
supplied by us and for the designated use. When dissolving in or mixing with other
substances and under conditions deviating from those stated in EN374 please
contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,Internet: www.kcl.de).
Full contact
Material: Viton®
Minimum layer thickness: 0.7 mm

Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,Internet: www.kcl.de).
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 30 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

**Body Protection**
protective clothing

**Respiratory protection**
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9. PHYSICAL/CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**

**General Information**

| | |
|---|---|
| **Physical state** | Powder |
| **Colour** | White |
| **Odor** | No data available |
| **Odor Threshold** | No data available |
| **pH** | 2.5 - 4.0 |
| **Melting point/freezing point** | 270 - 274 °C (518 - 525 °F) |
| **Boiling point or initial boiling point and boiling range** | No data available |
| **Flammability** | No data available |
| **Lower and upper explosion limit** | |
| **Lower:** | No data available |
| **Upper:** | No data available |
| **Flash point:** | No data available |
| **Auto-ignition temperature:** | No data available |
| **Decomposition temperature:** | No data available |
| **Viscosity:** | |
| **Viscosity, Kinematic** | No data available |
| **Viscosity, dynamic:** | No data available |
| **Dynamic:** | No data available |
| **Solubility** | No data available |
| **Partition coefficient n-octanol/water** | No data available |
| **Vapour pressure at 20 °C:** | No data available |
| **Density** | No data available |

| | |
|---|---|
| **Relative density** | No data available |
| **Vapour pressure** | No data available |
| **Explosive properties** | No data available |
| **Oxidizing properties** | No data available |

**9.2 Other information:**
No data available

## SECTION 10. STABILITY AND REACTIVITY

**10.1 Reactivity:**
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

**10.2 Chemical stability**
The product is chemically stable under standard ambient conditions (room temperature)

**10.3 Possibility of hazardous reactions:**
Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitrosamines!
Violent reactions possible with:
Strong oxidizing agents

**10.4 Conditions to avoid:**
No further relevant information available.

**10.5 Incompatible materials:**
Strong oxidizing agents

**10.6 Hazardous decomposition products:**
In the event of fire: see section 5

## SECTION 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity:**
No data available
Inhalation: No data available
Dermal: No data available
No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

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

**NTP:**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:**

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**11.2 Additional Information**

No data available.

## SECTION 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**

No data available

**12.2 Persistence and degradability:**

**Biodegradability**

No data available

**12.3 Bioaccumulative potential:**

No data available

**12.4 Mobility in soil:**

No data available

**12.5 Results of PBT and vPvB assessment**

**PBT:** No data available

**vPvB:** No data available

**12.6 Endocrine disrupting properties**

No data available

**12.7 Other adverse effects:**

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**

Waste material must be disposed of in accordance with the national and local regulations.

Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions. The chemical must be disposed or recycled in accordance with Waste Disposal Act. See www.epa.gov.tw for the information of chemical waste disposal companies and their contacts.

## SECTION 14. TRANSPORT INFORMATION

**International Regulations**
**IATA-DGR**
Not regulated as a dangerous good
UN/ID No. : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
Packing instruction (cargo aircraft): Not applicable
Packing instruction (passenger aircraft): Not applicable
**IMDG-Code**
Not regulated as a dangerous good
UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
EmS Code : Not applicable
Marine pollutant : no
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
Not applicable for product as supplied.
**Special precautions for user**
Remarks : Not classified as dangerous in the meaning of transport regulations.

## SECTION 15. REGULATORY INFORMATION

**15.1 Safety, health and environmental regulations specific for the product in question:**
**Inventory of Existing Chemical Substances in China (IECSC)**
Substance is not listed.
**Chemical Substance Inventory in Taiwan, China (TCSI)**
Substance is listed.
**Japan Existing and New Chemical Substances Inventory (ENCS)**
Substance is not listed.
**Korea Existing Chemicals List (KECL)**
Substance is not listed.
**Korea Priority Existing Chemicals List (PEC)**
Substance is not listed.
**TSCA Chemical Substance Inventory**
Substance is not listed.
**EU EINECS/ELINCS/NLP**
Substance is not listed.
**New Zealand Inventory of Chemicals (NZIoC)**
Substance is not listed.
**Philippine Inventory of Chemicals and Chemical Substances (PICCS)**
Substance is not listed.
**Australian Inventory of Industrial Chemicals (AIIC)**

Substance is not listed.

**Canada Domestic Substances List (DSL)**

Substance is not listed.

**Canada Non-domestic Substances List (NDSL)**

Substance is not listed.

**Thailand Existing Chemicals Inventory (TECI)**

Substance is not listed.

**Vietnam National Chemical Inventory (NCI)**

Substance is not listed.

**15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

## SECTION 16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Abbreviations and acronyms:**

NOAEL: Non Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

**According to Regulation 1907/2006 (EC), Article 31**

| | |
|---|---|
| **Date that the SDS was prepared:** | 2026/01/10 |
| **Version:** | 4.1 |

**Disclaimer**

This SDS was prepared sincerely on the basis of the information we could obtain. However, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information, but also the laws and regulations of the organization, area and country where the product is to be used, which shall be given the first priority.

The product is supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added hereafter. If the product is to be used beyond the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The

product must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set upon each user's own responsibility.

**End of Safety Data Sheet**

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