Chemical Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier: Dicyclohexylamine.

Other means of identification: N,N-Dicyclohexylamine; Perhydrodiphenylamine.

Recommended use of the chemical and restrictions on use: This material can be used to produce resins, dyes, medicines, etc.

Supplier's details:

Emergency phone number: /

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Acute toxicity, oral Category 4

Skin corrosion/irritation Category 1C

Serious eye damage/eye irritation Category 1

Hazardous to the aquatic environment, acute hazard Category 1

Hazardous to the aquatic environment, long-term hazard Category 1

GHS Label elements, including precautionary statements:

Symbol:

Signal word: Danger

Hazard statement(s): Harmful if swallowed. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects.

Precautionary statement(s):

Prevention:

Wash …thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dusts or mists. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response:

If swallowed: Get medical help. Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Immediately rinse with water for several minutes. Wash contaminated clothing before reuse. If inhaled Remove person to fresh air and keep comfortable for breathing. Get emergency medical help immediately. Specific treatment (see below). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help. Collect spillage.

Storage:

Store locked up.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
Dicyclohexylamine	101-83-7	99.3973%。

Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: Quickly move to a place with fresh air. Keep the airway unobstructed. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration immediately. Consult a physician.

In case of skin contact: Wash off with soap and plenty of running water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of running water for at least 15 minutes and consult a physician immediately.

If ingestion: Rinse mouth with water. Do not induce vomit. Consult a physician.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: /

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Use foam, dry powder, water spray, etc.

Special hazards arising from the chemical: This material is combustible and may burn and decompose at high temperature and fire and release toxic fumes.

Special protective actions for fire-fighters: Firefighters must wear air breathing apparatus, fire-fighting suits and protective gloves to extinguish in the upwind direction. Whenever possible, remove the container from the fire to open space and use spray water to cool unopened containers.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: It is recommended that emergency personnel wear protective masks and fire protective overalls. Do not touch the spill directly.

Environmental precautions: Isolate contaminated areas and restrict access.

Methods and materials for containment and cleaning up: Small amount of leakage: adsorption with sand or other inert materials. Do not allow products to enter restricted areas such as sewers. A large amount of leakage: building a dike or digging a pit to contain. Transfer to a tank truck or special collector with a pump and transport to a waste disposal site for disposal.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: There should be sufficient local exhaust in workplace. Operators should be trained and strictly follow the operating procedures. Operators are advised to wear protective masks, corrosion-resistant protective clothing and rubber gloves. Operators should load and unload lightly during handling to prevent damage to the package. There should be leakage treatment equipment in workplace. There may be harmful residues in empty containers.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well-ventilated warehouse. Keep away from fire and heat. Protect from direct sunlight. The package should be sealed and not exposed to moisture. It should be stored separately from oxidants, acids, flammable materials, etc., and should not be mixed. The storage area should be provided with suitable materials to contain spills.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: /

Appropriate engineering controls: Close strictly and provide sufficient local exhaust.
Individual protection measures
Eye/face protection: Wear a protective mask.
Skin protection: Wear corrosion-resistant protective clothing.
Respiratory protection: Air respirators should be worn during emergency rescue or evacuation.
Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Transparent liquid.
Colour	colorless.
Odour	/
Melting point/freezing point	-0.1℃.
Boiling point or initial boiling point and boiling range	256℃.
Flammability	/
Lower and upper explosion limit/flammability limit	0.9%-6.9%.
Flash point	105℃.
Auto-ignition temperature	/
Decomposition temperature	/
pH	/
Kinematic viscosity	/
Solubility	0.08g/100ml（25℃）.
Partition coefficient: n-octanol/water (log value)	3.5.
Vapour pressure	1.6 kPa（37.7℃）.
Density and/or relative density	0.9.
Relative vapour density	6.25.
Particle characteristics	/

Section 10 STABILITY AND REACTIVITY

Reactivity: /
Chemical stability: This material is stable in normal temperature.
Possibility of hazardous reactions: Decomposes on burning. This produces toxic fumes including nitrogen oxides. The substance is a strong base. It reacts violently with acid and is corrosive. Reacts with strong oxidants.
Conditions to avoid: Spark, static electricity and high temperature.
Incompatible materials: Flammable materials, acids and oxidizers.
Hazardous decomposition products: Oxycarbides and nitrogen oxides.

Section 11 TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: Ingestion (swallowing), skin/eye exposure and inhalation.
Symptoms related to the physical, chemical and toxicological characteristics: /
Acute health effects:
Ingestion can cause symptoms such as burning, nausea, vomiting and abdominal pain.
Skin contact can cause redness, pain and burn.
Inhalation can cause cough, throat pain and burn.
Eyes contact can cause irritation, pain and burn.

Chronic health effects: The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterized by skin redness (erythema) thickening of the epidermis.

Numerical measures of toxicity (such as acute toxicity estimates): /

Section 12 ECOLOGICAL INFORMATION

Toxicity:

Endpoint	Test Duration (hr)	Species	Value
LC50	96	Fish	1.18mg/L
EC50	48	Crustacea	0.1mg/L
EC50	72	Algae or other aquatic plants	0.38mg/L
NOEC	72	Algae or other aquatic plants	0.016mg/L

Persistence and degradability: High.

Bioaccumulative potential: Medium (LogKOW = 4.3666).

Mobility in soil: Low (KOC = 256.3).

Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Dispose this product by safe burial. Damaged containers are prohibited from being reused and should be buried in the prescribed place.

Section 14 TRANSPORT INFORMATION

UN number: 2565.

UN proper shipping name: DICYCLOHEXYLAMINE.

Transport hazard class(es) : 8.

Packing group, if applicable: III.

Environmental hazards: Marine pollutant.

Special precautions for user: /

Section 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB/T 16483-2008, GB 13690-2009, GB 18218-2018, GB 15258-2009, GB 6944-2012, GB 190-2009, GB/T 191-2008, GB 12268-2012, GB/T 15098-2008, GBZ 2.1-2019, GBZ 2.2-2007 as well as the following regulations: Railway Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation.

Section 16 OTHER INFORMATION

References	UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals
Form Date	14-Sep-2021

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared

based on the risk of the mixture.

Note 2: Manufacturer/supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.