

SAFETY DATA SHEET

DICYCLOHEXYLAMINE

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

1.1 Product identifier:	
CAS Number:	101-83-7
EC number:	202-980-7.
1.2 SYNONYMS:	• DCHA • N,N-Dicyclohexylamine • Cyclohexylcyclohexylamine • Bis(cyclohexyl)amine

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
2.2 Label elements:	Labelling according to Regulation (EC) No 1272/2008 Acute Toxicity (Oral) (Category 4) Acute Toxicity (Inhalation) (Category 4) Skin Corrosion/Irritation (Category 2) Serious Eye Damage/Irritation (Category 2A) Hazardous to the Aquatic Environment (Chronic) (Category 3)
Hazard Pictograms:	
Signal Word:	Danger
Hazard statements:	H302: Harmful if swallowed. H332: Harmful if inhaled. H315: Causes skin irritation. H319: Causes serious eye irritation. H412: Harmful to aquatic life with long-lasting effects.

Precautionary Statements:	P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P352: IF ON SKIN: Wash with plenty of water. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
2.3 Other hazards:	
Inhalation:	may cause respiratory irritation, coughing, shortness of breath.
Ingestion:	can cause nausea, vomiting, abdominal pain, and dizziness, and may lead to more severe symptoms such as central nervous system depression.
Skin Contact:	can cause irritation, redness, and itching, and prolonged or repeated exposure may lead to dermatitis or allergic reactions.
Eye contact:	can cause severe irritation, redness, pain, and watering, and may lead to temporary vision impairment.
Chronic Exposure:	may lead to respiratory issues, skin sensitization, or damage to the liver and kidneys, and prolonged contact can increase the risk of developing dermatitis or other allergic reactions.
Aggravation of pre-existing conditions:	may aggravate pre-existing conditions such as asthma, respiratory disorders, or skin conditions like eczema, and can potentially worsen liver or kidney damage in individuals with pre-existing organ impairments.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 101-83-7 DICYCLOHEXYLAMINE
Identification number(s):	EC number: 202-980-7

SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Protect the victim against cold. Consult a physician.
After skin contact:	Remove contaminated clothing. Wash with soap and water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion. Never give anything by mouth to an unconscious person. Do not induce vomiting. Never use any neutralising solutions. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	Acute exposure can cause severe respiratory irritation, skin burns, eye damage, and gastrointestinal distress, while chronic exposure may lead to long-term respiratory issues, skin sensitization, and potential liver or kidney damage.
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:	Carbon dioxide. Water spray. Alcohol-resistant foam.
5.2 Special hazards arising from the substance or mixture:	Formation of explosive dust/air mixtures is possible. Flammable.
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device. Cool tanks/drums with water spray/remove them into safety.
5.4 further information:	no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	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 explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Do not enter this chemical into drains.
6.3 Methods and material for containment and cleaning up:	Take up spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation.
7.2 Conditions for safe storage, including any incompatibilities:	Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.
Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required
Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties General Information	
Appearance: Form:	Liquid
Colour:	Colourless to pale yellow
Odour:	Fishy odor
pH-value:	12
Melting point/Melting range:	-26°C
Boiling point/Boiling range:	223°C
Flammability (solid, gaseous):	Flammable
Ignition temperature:	480°C
Decomposition temperature:	No data available
Self-igniting:	Not applicable
Flash point:	91°C
Danger of explosion:	No

Explosion limits: Lower:	1.0%
Explosion limits: Upper:	7.5%
Vapour pressure:	0.3 mm Hg at 25°C
Density at 20 °C:	0.88 g/cm ³
Relative density:	0.88
Vapour density:	5.9
Evaporation rate:	Slow
Solubility in / Miscibility with- water at 20 °C:	Slightly soluble
Partition coefficient:(n- octanol/water)	3.47
Viscosity:	2.9 cP at 25°C

SECTION 10: Stability and reactivity

10.1 Reactivity	reactive with strong oxidizing agents, acids, and halogens.
10.2 Chemical stability	This chemical is stable under storage conditions.
10.3 Possibility of hazardous reactions	Strong oxidizing agents, Acids, Halogens.
10.4 Conditions to avoid	Heat, sparks, or open flames, Direct sunlight or high temperatures, Moisture.
10.5 Incompatible materials	Strong oxidizing agents, Strong acids, Halogenated compounds, Copper, brass.
10.6 Hazardous decomposition products	Ammonia, Nitrogen oxides, carbon monoxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	LD50 (Oral, Rat): 200 mg/kg LD50 (Dermal, Rabbit): 200 mg/kg LC50 (Inhalation Rat): 1,4 mg/l (6hr)
Skin corrosion/Irritation:	Causes serious skin corrosion

Serious eye damage/irritation:	Causes serious eye irritation
Respiratory damage/irritation:	No data available
Ingestion:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
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
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	
Biodegradability:	Biodegradable in aerobic environments.

SECTION 12: Ecological information

12.1 Toxicity Aquatic toxicity:	LC50(fish): 660 mg/l (96hr) EC50(daphnia): no data available EC50(algae): no data available
12.2 Persistence and degradability:	Biodegradable in aerobic environments.
12.3 Bioaccumulative potential:	moderate bioaccumulative
12.4 Mobility in soil:	Low mobility
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging Recommendation:	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Water, Isopropyl alcohol, ethanol, citric acid, mild detergent, chemical spill cleanup kits.

SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	2571
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	DICYCLOHEXYLAMINE
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	8
14.4 Packing group · ADR, IMDG, IATA:	2
14.5 Environmental hazards:	Yes, harmful for aquatic life.
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is not classified in listed substance
Named dangerous substances:	This substance is not listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out.

SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.