

# Nanjing FNAT Chemical Co.,Ltd.

## M S D S

Name: Dicyclohexylamine Material Safety Data Sheet

Synonym: DCHA; N,N-Dicyclohexylamine; N-Cyclohexylcyclohexanamine;  
Dodecahydrodiphenylamine

CAS:101-83-7

### Section 1 - Chemical Product

MSDS Name:Dicyclohexylamine Material Safety Data Sheet

Synonym:DCHA; N,N-Dicyclohexylamine; N-Cyclohexylcyclohexanamine;  
Dodecahydrodiphenylamine

### Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
101-83-7	Dicyclohexylamine	99 %	202-980-7

### Section 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Harmful if swallowed. Causes burns. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.Cancer suspect agent.Corrosive.

Potential Health Effects

Eye:

Contact with eyes may cause severe irritation, and possible eye burns.

Skin:

May cause severe irritation and possible burns.

Ingestion:

Harmful if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns.

Inhalation:

May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract.

Chronic:

May cause cancer according to animal studies.

### Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

#### Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

#### Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section.

#### Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

#### Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits CAS# 101-83-7: Russia: 1 mg/m<sup>3</sup> TWA Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: clear, colorless

Odor: Fishy odor.

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 256 deg C

Freezing/Melting Point: -1 deg C

Autoignition Temperature: 240 deg C ( 464.00 deg F)

Flash Point: > 210 deg F (> 98.89 deg C)

Explosion Limits, lower: 0.8

Explosion Limits, upper: 7.4

Decomposition Temperature: Not available.

Solubility in water: Slightly soluble in water.

Specific Gravity/Density: 0.91

Molecular Formula: C12H23N

Molecular Weight: 181.1677

## Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources.

Incompatibilities with Other Materials:

Acids, acid chlorides, acid anhydrides, oxidizing agents, and chloroformates.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

## Section 11 - TOXICOLOGICAL INFORMATION

CAS# 101-83-7: HY4025000 LD50/LC50:

CAS# 101-83-7: Draize test, rabbit, eye: 750 ug/24H Severe; Draize test, rabbit, skin: 2 mg/24H Severe; Oral, mouse: LD50 = 500 mg/kg; Oral, rat: LD50 = 373 mg/kg.

Carcinogenicity:

Dicyclohexylamine - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

## Section 12 - ECOLOGICAL INFORMATION

### Section 13 - DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

### Section 14 - TRANSPORT INFORMATION

Shipping Name: DICYCLOHEXYLAMINE

Hazard Class: 8

UN Number: 2565

Packing Group: III

### Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C N

Risk Phrases:

R 22 Harmful if swallowed.

R 34 Causes burns.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 60 This material and its container must be

disposed of as hazardous waste.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 101-83-7: 2

Canada

CAS# 101-83-7 is listed on Canada's DSL List.

CAS# 101-83-7 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 101-83-7 is listed on the TSCA inventory.