



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: Dicyclohexylmethane 4,4'-Diisocyanate (mixture of isomers)
Product code: D2380
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Revision number: 1

2. HAZARDS IDENTIFICATION

Classification of the GHS

PHYSICAL HAZARDS

Not classified

HEALTH HAZARDS

Acute toxicity (Inhalation)
 Skin corrosion/irritation
 Serious eye damage/eye irritation
 Respiratory sensitization
 Skin sensitization
 Specific target organ toxicity
 - Single exposure [Category 1]
 Specific target organ toxicity
 - Single exposure [Category 3]

Category 2
 Category 2
 Category 2A
 Category 1
 Category 1
 respiratory system, nervous system

Respiratory tract irritation

ENVIRONMENTAL HAZARDS

Acute aquatic toxicity
 Chronic aquatic toxicity

Category 1
 Category 1

GHS label elements

Pictograms or hazard symbols



Signal word

Hazard statement

Danger
 Fatal if inhaled
 Causes skin irritation
 Causes serious eye irritation
 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 May cause an allergic skin reaction
 Causes damage to organs : respiratory system nervous system
 May cause respiratory irritation
 Very toxic to aquatic life
 Very toxic to aquatic life with long lasting effects

Precautionary statements

2. HAZARDS IDENTIFICATION

[Prevention]

Do not breathe.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Wash hands thoroughly after handling.
Wear respiratory protection.

[Response]

Wear protective gloves/eye protection/face protection.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Gently wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
IF exposed: Call a POISON CENTER or doctor/physician.
Collect spillage.

[Storage]

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

[Disposal]

Dispose of contents/container through a waste management company authorized by the local government

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Substance
Component(s):	Dicyclohexylmethane 4,4'-Diisocyanate (mixture of isomers)
Percent:	>90.0%(GC)
CAS Number:	5124-30-1
Synonyms:	4,4'-Methylenebis(cyclohexyl Isocyanate) (mixture of isomers)
Chemical Formula:	C ₁₅ H ₂₂ N ₂ O ₂

4. FIRST AID MEASURES

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Call a POISON CENTER or doctor/physician.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Call a POISON CENTER or doctor/physician.
Ingestion:	Call a POISON CENTER or doctor/physician. Rinse mouth.
Protection of first-aiders:	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Extinguishing media not to be used:	Solid streams of water
Specific hazards:	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
Specific methods:	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.
Special protective equipment for firefighters:	When extinguishing fire, be sure to wear personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
Environmental precautions:	Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned.
Methods and materials for containment and cleaning up:	Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Handling

Technical measures:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapor or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapor or aerosol will be generated.
Advice on safe handling:	Avoid contact with skin, eyes and clothing.

Storage

Storage conditions:	Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents.
Packaging material:	Law is followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:	Install a closed system or local exhaust. Also install safety shower and eye bath.
Exposure limits:	
ACGIH TLV(TWA):	0.005 ppm
Personal protective equipment	
Respiratory protection:	Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
Hand protection:	Impervious gloves.
Eye protection:	Safety goggles. A face-shield, if the situation requires.
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C):	Liquid
Form:	clear
Color:	Colorless - Very pale yellow
Odor:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Boiling Point/Range:	168 °C/0.2kPa
Flash Point:	No data available
Explosive limits	
Lower:	No data available
Upper:	No data available
Vapor Pressure:	0.13Pa/25°C
Vapor Density:	9.0
Density:	1.07
Solubility:	Soluble in : Acetone Water

10. STABILITY AND REACTIVITY

Stability:	Stable under proper conditions.
Reactivity:	No special reactivity has been reported.
Conditions to avoid:	Moisture-sensitive
Incompatible materials:	oxidizing agents
Hazardous Decomposition Products:	Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	ori-rat LD50:9900 mg/kg ihl-rat LC50:20 ppm/5H
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	No data available
RTECS Number:	NQ9250000

12. ECOLOGICAL INFORMATION

Ecotoxicity:	
Fish:	No data available
Crustacea:	No data available
Algae:	No data available
Persistence / degradability:	No data available
Bioaccumulative potential(BCF):	No data available
Mobility in soil	
log Pow:	No data available
Soil adsorption (Koc):	No data available
Henry's Law constant(PaM³/mol):	No data available

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Hazards Class:	6.1: Toxic substance.
UN-No:	2206
Proper shipping name:	Isocyanates, toxic, n.o.s.
Packing group:	II

15. REGULATORY INFORMATION

Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

16. OTHER INFORMATION

The reference company name of written contents

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16. OTHER INFORMATION

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This MSDS was prepared sincerely on the basis of the information we could obtained, 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 products are to be used, which shall be given the first priority. products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind 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 products 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 up on each user's own responsibility.