



# SAFETY DATA SHEET

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

**Product name:** 1,3-Dimethylcyclohexane (cis- and trans- mixture)  
**Product code:** D0699  
**Company:** TCI (Shanghai) DEVELOPMENT CO., LTD.  
**Address:** No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China  
**Responsible Department:** Sales Department  
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**Revision number:** 1

## 2. HAZARDS IDENTIFICATION

### Classification of the GHS

#### PHYSICAL HAZARDS

Flammable liquids

Category 2

#### HEALTH HAZARDS

Aspiration hazard

Category 1

#### ENVIRONMENTAL HAZARDS

Not classified

### GHS label elements

#### Pictograms or hazard symbols



#### Signal word

Danger

#### Hazard statement

Highly flammable liquid and vapour  
 May be fatal if swallowed and enters airways

#### Precautionary statements

##### [Prevention]

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against ignition by the static discharge and the spark.

Wear protective gloves/eye protection/face protection.

##### [Response]

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

##### [Storage]

Store in a well-ventilated place. Keep cool.

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):** 1,3-Dimethylcyclohexane (cis- and trans- mixture)  
**Percent:** >97.0%(GC)  
**CAS Number:** 591-21-9  
**Synonyms:** Hexahydro-m-xylene (cis- and trans- mixture)  
**Chemical Formula:** C<sub>8</sub>H<sub>16</sub>

#### 4. FIRST AID MEASURES

- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- Skin contact:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
- Eye contact:** 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.
- Ingestion:** Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
- 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, carbon dioxide.
- Extinguishing media not to be used:** Water (It may scatter and spread fire.)
- 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: Keep containers cool by spraying with water. Eliminate all ignition sources 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:** Prevent product from entering drains.
- Methods and materials for containment and cleaning up:** Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. 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.
- Prevention of secondary hazards:** Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

#### 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. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. 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 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.
- Personal protective equipment**

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 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 - Almost colorless
- Odor:** No data available
- pH:** No data available
- Melting point/freezing point:** No data available
- Boiling Point/Range:** No data available
- Flash Point:** 6°C
- Explosive limits**
- Lower:** No data available
- Upper:** No data available
- Density:** 0.77
- Solubility:** No data available

## 10. STABILITY AND REACTIVITY

- Stability:** Stable under proper conditions.
- Reactivity:** No special reactivity has been reported.
- Incompatible materials:** oxidizing agents
- Hazardous Decomposition Products:** Carbon monoxide, Carbon dioxide

## 11. TOXICOLOGICAL INFORMATION

- Acute Toxicity:** No data available
- 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

## 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(PaM<sup>3</sup>/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 but exert extra care in igniting as this material is highly flammable. Observe all federal, state and local regulations when disposing of the substance

### 14. TRANSPORT INFORMATION

**Hazards Class:** 3: Flammable liquid.  
**UN-No:** 2263  
**Proper shipping name:** Dimethylcyclohexanes  
**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.

**The list of a dangerous chemical(2002)/CN-No.:** 32012

### 16. OTHER INFORMATION

**The reference company name of written contents**

**Company:** TCI (Shanghai) DEVELOPMENT CO., LTD.  
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