N,N,2,2-Tetramethyl-1,3-propanediamine

Revision date: 11/30/2010

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# **SAFETY DATA SHEET**

Revision number: 1

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

**Product name:** N,N,2,2-Tetramethyl-1,3-propanediamine

Product code: D1733

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

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Revision number: 1

## 2. HAZARDS IDENTIFICATION

Classification of the GHS
PHYSICAL HAZARDS
Flammable liquids

Flammable liquids Category 3

**HEALTH HAZARDS** 

Skin corrosion/irritationCategory 1BSerious eye damage/eye irritationCategory 1ENVIRONMENTAL HAZARDSNot classified

**GHS** label elements

Pictograms or hazard symbols





Signal word Danger

Hazard statement Flammable liquid and vapour

Causes severe skin burns and eye damage

**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.

Do not breathe.

Wash hands thoroughly after handling.

Wear protective gloves/eye protection/face protection.

[Response] IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

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

skin with water/shower.

Wash contaminated clothing before reuse.

Immediately call a POISON CENTER or doctor/physician.

[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

N,N,2,2-Tetramethyl-1,3-propanediamine Component(s):

>98.0%(GC)(T) Percent: **CAS Number:** 53369-71-4

Synonyms: N,N-Dimethylneopentanediamine

**Chemical Formula:**  $C_7H_{18}N_2$ 

### 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. Immediately call a POISON CENTER or doctor/physician.

Rinse cautiously with water for several minutes. Remove contact lenses, if present Eye contact:

and easy to do. Continue rinsing. Immediately call a POISON CENTER or

doctor/physician.

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 Water (It may scatter and spread fire.)

be used:

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: Keep containers cool by

Take care as it may decompose upon combustion or in high temperatures to

spraying with water. Eliminate all ignition sources if safe to do so. When extinguishing fire, be sure to wear personal protective equipment.

Special protective

Specific hazards:

equipment for firefighters:

# **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 noninvolved 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.

Avoid contact with skin, eyes and clothing. Advice on safe handling:

# 7. HANDLING AND STORAGE

**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.

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 clear

Colorless - Almost colorless

Odor: No data available

PH: No data available

Melting point/freezing point: No data available

**Boiling Point/Range:** 153 °C **Flash Point:** 35°C

**Explosive limits** 

Lower: No data available Upper: No data available

Density: 0.82

Solubility: No data available

# 10. STABILITY AND REACTIVITY

**Stability:** Stable under proper conditions.

**Reactivity:** No special reactivity has been reported.

Conditions to avoid: Hygroscopic Incompartible materials: oxidizing agents

Hazardous Decomposition Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

**Products:** 

## 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:
Skin corrosion/irritation:
Serious eye
No data available
No data available
No data available

damage/irritation:

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

### 12. ECOLOGICAL INFORMATION

Algae: No data available
Persistence / degradability: No data available
Bioaccumulative No data available

potential(BCF): Mobillity in soil

log Pow:No data availableSoil adsorption (Koc):No data availableHenry's LawNo data available

constant(PaM³/mol):

### 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: 8: Corrosive.

**Subsidiary risk:** 3: Flammable liquid.

UN-No: 2734

**Proper shipping name:** Polyamines, liquid, corrosive, flammable, n.o.s.

Packing group:

### 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

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

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