

#### Hefei TNJ Chemical Industry Co.,Ltd.

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# Material Safety Data Sheet

## 2,2-Dimethyl-1,3-propanediol

#### Section 1: **Chemical Product and Company Identification**

#### 1.1 Product identifiers

Trade name: 2,2-Dimethyl-1,3-propanediol

Molecular formula: C6H12N2S4

CAS Nr: 126-30-7

Molecular weight: C5H12O2

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory tests and assays only, as described in the European Pharmacopoeia.

### 1.3 Details of the supplier of the safety data sheet

#### Hefei TNJ Chemical Industry Co.,Ltd.

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**1.4 Contact Information for Emergency:** (0086) 551 65418678

### Section 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xi Irritant R41

For the full text of the R-phrases mentioned in this Section, see Section 16.

#### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s)

H318 Causes serious eye damage.

Precautionary statement(s)

P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements none

2.3 Other hazards - none

## Section 3: Composition/information on ingredients

#### 3.1 Substances

Synonyms: Neopentylglycol

NPG Glycol

Formula: C5H12O2

Molecular Weight: 104,15 g/mol

CAS-No.: 126-30-7 EC-No.: 204-781-0

### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration	
2,2-Dimethylpropane-1,3-diol			
CAS-No. 126-30-7	Eye Dam. 1; H318	<= 100 %	
EC-No. 204-781-0			

### Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration	
Thiram			
CAS-No. 126-30-7	Xi, R41	<= 100 %	
EC-No. 204-781-0			

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

## **Section 4: First Aid Measures**

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

## **Section 5: Firefighting measures**

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

#### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 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 dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### 6.2 Environmental precautions

Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

## Section 7: Handling and Storage

#### 7.1 Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

hygroscopic

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## Section 8: Exposure Controls/Personal Protection

#### 8.1 Control parameters

#### Components with workplace control parameters

#### 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

#### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

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 and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de,

test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the

concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Do not let product enter drains.

## **Section 9: Physical and Chemical Properties**

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: flakes

Colour: colourless b) Odour sweet

- c) Odour Threshold no data available
- d) pH no data available
- e) Melting point/freezing pointMelting point/range: 123 127 °Cf) Initial boiling point and boiling range

209 °C at 1.013 hPa

- g) Flash point 103 °C closed cup
- h) Evapouration rate no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower Upper explosion limit: 18,8 %(V)

flammability or explosive limits Lower explosion limit: 1,37 %(V)

- k) Vapour pressure < 1,1 hPa at 20 °C
- I) Vapour density no data available
- m) Relative density 1,06 g/cm3 at 20 °C
- n) Water solubility 830 g/l at 20 °C soluble
- o) Partition coefficient: noctanol/water log Pow: -0,15 at 25 °C
- p) Auto-ignition temperature 399 °C at 1.013,25 hPa
- q) Decomposition temperature no data available
- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties no data available

#### 9.2 Other safety information

no data available

## Section 10: Stability and Reactivity Data

### 10.1 Reactivity

no data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

Avoid moisture.

#### 10.5 Incompatible materials

Strong oxidizing agents, Acid chlorides, Acid anhydrides

#### 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

## **Section 11: Toxicological Information**

## 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - rat - male and female - > 6.400 mg/kg

(OECD Test Guideline 401)

#### Skin corrosion/irritation

Skin - rabbit

Result: No skin irritation

#### Serious eye damage/eye irritation

Eyes - rabbit

Result: Risk of serious damage to eyes. - 24 h

(OECD Test Guideline 405)

#### Respiratory or skin sensitisation

- mouse

Result: Does not cause skin sensitisation.

(OECD Test Guideline 429)

#### Germ cell mutagenicity

Ames test

S. typhimurium

Result: negative

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## 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

#### **Additional Information**

Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level - 300 mg/kg

RTECS: TY5775000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## Section 12: Ecological Information

#### 12.1 Toxicity

Toxicity to fish static test LC50 - Oryzias latipes - > 10.000 mg/l - 48 h

Toxicity to daphnia and

other aquatic

invertebrates

static test EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h

Toxicity to algae static test EC50 - Desmodesmus subspicatus (green algae) - > 500 mg/l - 72 h

## 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 70 - 80 % - Readily biodegradable.

(OECD Test Guideline 301B)

#### 12.3 Bioaccumulative potential

Bioaccumulation Cyprinus carpio (Carp) - 42 d

- 1 mg/l

Bioconcentration factor (BCF): < 9

(OECD Test Guideline 305C)

#### 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

no data available

## Section 13: Disposal Considerations

#### 13.1 Waste treatment methods

#### **Product**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

## Contaminated packaging

Dispose of as unused product.

### Section 14: Transport Information

#### 14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

no data available

## Section 15: Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data available

#### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## **Section 16: Other Information**

#### Full text of H-Statements referred to under sections 2 and 3.

Eye Dam. Serious eye damage

H318 Causes serious eye damage.

#### Full text of R-phrases referred to under sections 2 and 3

Xi Irritant

R41 Risk of serious damage to eyes.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.