



# MATERIAL SAFETY DATA SHEET

## SDS/MSDS

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name : Hexylene Glycol

CAS-No. : 107-41-5

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

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

Company : Bio-Chem Chemicals  
5455 Nicholson Road, Science Market  
Ambala Cantt, 133001 - Haryana  
+91 82952 41953  
info@biofinechemical.com - www.biofinechemical.com

#### 1.4 Emergency telephone number

Emergency Phone # +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No

**1272/2008** Skin irritation (Category 2), H315 Eye irritation

(Category 2), H319

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

#### 2.2 Label elements

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

Pictogram

Signal word	Warning
Hazard statement(s)	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
Precautionary statement(s)	
P280	Wear 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.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
Supplemental	
Hazard Statements	none

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : (±)-2-Methyl-2,4-pentanediol  
MPD

Formula : C<sub>6</sub>H<sub>14</sub>O<sub>2</sub>  
Molecular weight : 118.18 g/mol  
CAS-No. : 107-41-5  
EC-No. : 203-489-0  
Index-No. : 603-053-00-3

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

Component	Classification	Concentration
<b>2-Me hylpentane-2,4-diol</b>		
CAS-No. 107-41-5	Skin Irrit. 2; Eye Irrit. 2; H315,	<= 100 %
EC-No. 203-489-0	H319	
Index-No. 603-053-00-3		

For the full text of the H-Statements 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

### 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 firefighting 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 breathing vapours, mist or gas. Ensure adequate ventilation. 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**

Soak up with inert absorbent material and dispose of as hazardous waste. 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 contact with skin and eyes. Avoid inhalation of vapour or mist. 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.

Store under inert gas. Hygroscopic.

Storage class (TRGS 510): Combustible liquids

### **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**

### **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**

Safety glasses with side-shields conforming to EN166 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.

**Body Protection**

Impervious clothing, 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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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: liquid<br>Colour: colourless                                 |
| b) Odour  | sweet, mild  |
| c) Odour Threshold                              | No data available  |
| d) pH   | 6.0 - 8.0 at 118.2 g/l at 25 °C                                    |
| e) Melting point/freezing point                 | Melting point/range: -40 °C - lit.                                 |
| f) Initial boiling point and boiling range      | 197 °C - lit.  |
| g) Flash point                                  | 94 °C - closed cup   |
| h) Evaporation rate                             | No data available  |
| i) Flammability (solid, gas)                    | No data available  |
| j) Upper/lower flammability or explosive limits | Upper explosion limit: 7.4 %(V)<br>Lower explosion limit: 1.3 %(V) |
| k) Vapour pressure                              | 0.02 mmHg at 20 °C   |
| l) Vapour density                               | 4.08 - (Air = 1.0)   |
| m) Relative density                             | 0.925 g/cm <sup>3</sup> at 25 °C                                   |
| n) Water solubility                             | ca.118.2 g/l at 20 °C  |
| o) Partition coefficient: n-octanol/water       | log Pow: -0.14   |
| p) Auto-ignition temperature                    | No data available  |
| 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**

- |                         |                    |
|-------------------------|--------------------|
| Relative vapour density | 4.08 - (Air = 1.0) |
|-------------------------|--------------------|

## **SECTION 10: Stability and reactivity**

### **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 acids, Strong oxidizing agents, Strong reducing agents

### **10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

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 - > 4,000 mg/kg(2-Methylpentane-2,4-diol)  
(OECD Test Guideline 420)

LD50 Dermal - Rabbit - 7,892 mg/kg(2-Methylpentane-2,4-diol)

#### **Skin corrosion/irritation**

Skin - Rabbit(2-Methylpentane-2,4-diol)

Result: Skin irritation - 24 h

#### **Serious eye damage/eye irritation**

No data available(2-Methylpentane-2,4-diol)

#### **Respiratory or skin sensitisation**

Maximisation Test - Guinea pig(2-Methylpentane-2,4-diol)

Result: negative

(OECD Test Guideline 406)

#### **Germ cell mutagenicity**

Chromosome aberration test in vitro(2-Methylpentane-2,4-diol)

Chinese hamster ovary cells

Result: negative

#### **Carcinogenicity**

No data available(2-Methylpentane-2,4-diol)

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 toxicity to reproduction(2-Methylpentane-2,4-diol)

#### **Specific target organ toxicity - single exposure**

No data available(2-Methylpentane-2,4-diol)

#### **Specific target organ toxicity - repeated exposure**

No data available

#### **Aspiration hazard**

No data available(2-Methylpentane-2,4-diol)

**Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 450 mg/kg(2-Methylpentane-2,4-diol)  
RTECS: SA0810000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(2-Methylpentane-2,4-diol)

**SECTION 12: Ecological information****12.1 Toxicity**

Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 8,690 mg/l - 96 h(2-Methylpentane-2,4-diol) (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 5,410 mg/l - 48 h(2-Methylpentane-2,4-diol) (OECD Test Guideline 202)
Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata (green algae) - > 429 mg/l - 72 h(2-Methylpentane-2,4-diol) (OECD Test Guideline 201)

**12.2 Persistence and degradability**

Biodegradability	aerobic - Exposure time 28 d(2-Methylpentane-2,4-diol) Result: 81 % - Readily biodegradable (OECD Test Guideline 301F)
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**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available(2-Methylpentane-2,4-diol)

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

No data available

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

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****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

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

**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.**

H315 Causes skin irritation.

H319 Causes serious eye irritation.