



**DIMETHYL GLYOXIME SOLUTION**  
(REAGENT FOR Bi, CO, Ni, Ag)

**MATERIAL SAFETY DATA SHEET**  
**SDS/MSDS**

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

**1.1 Product identifiers**

Product name : Dimethyl Glyoxime Solution (Reagent for Bi, CO, Ni, Ag)

Product Code : 826040

**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 : Central Drug House (P) Ltd  
7/28 Vardaan House  
Ansari Road Daryaganj  
New Delhi -110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

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

Flammable liquids (Category 2), H225

Eye irritation (Category 2A), H319

Germ Cell Mutagenicity (Category 1), H340

Reproductive toxicity (Category 1), H360

Specific target organ/systemic toxicity following single exposure (Category 1), H370

Specific target organ/systemic toxicity following repeated exposure (Category 1), H372

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)

H225

Highly flammable liquid and vapor.

H319

Causes serious eye irritation.

H340

May cause genetic defects.

H360

May damage fertility or the unborn child.

H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P210	Keep away from heat, sparks and open flame. No smoking.
P233	Keep container tightly closed.
P240	Ground container and receiving equipment.
P241	Use explosion-proof equipment.
P260	Do not breathe fumes, mist, vapors, or spray.
P264	Wash arms, hands and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves and eye protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P307 + P311	IF exposed: Call a POISON CENTER or physician.
P308 + P313	IF exposed or concerned: Get medical attention.
P314	Get medical attention if you feel unwell.
P321	Specific treatment (Wash areas of contact with water).
P337 + P313	If eye irritation persists: Get medical attention.
P370 + P378	In case of fire: Use dry chemical, foam or carbon dioxide to extinguish.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents in accordance with local, state, federal and international regulations.
Supplemental Hazard Statements	none

### 2.3 Other hazards

The substance does not fulfill the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

## SECTION 3: Composition/information on ingredients

### 3.1 Mixtures

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

Component	Formula	Molecular Weight	CAS No.	weight %
Ethyl Alcohol	CH <sub>3</sub> CH <sub>2</sub> OH	46.06 g/mol	67-17-5	94.05 %
Methyl Alcohol	CH <sub>3</sub> OH	32.04 g/mol	67-56-1	4.70 %
Dimethylglyoxime	C <sub>4</sub> H <sub>8</sub> N <sub>2</sub> O <sub>2</sub>	116.12 g/mol	95-45-4	1.25 %

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

Not expected to require first aid. If necessary, remove to fresh air.

#### In case of skin contact

Take off immediately all contaminated clothing. Rinse skin with water. Results in drying and cracking which can lead to secondary infections and dermatitis.

#### In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva.

**If swallowed**

Dilute immediately with water or milk. Induce vomiting. Call a physician.

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

Flammable liquid. Primarily toxic by ingestion. If ingested, give large quantity of water and induce vomiting. Call a physician. Contact may cause dryness and cracking of the skin. May cause irritation to the eyes. Wash areas of contact with plenty of water. May cause irritation of the respiratory system. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: Results in drying and cracking which can lead to secondary infections and dermatitis.

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

Specific treatment (Wash areas of contact with water).

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

**In case of fire:** Use dry chemical, foam or carbon dioxide to extinguish. Use water spray, dry chemical, alcohol foam, or carbon dioxide for extinguishing the surrounding fire. Water spray can be used to dilute spills to non-flammable mixtures.

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

Highly flammable liquid and vapor. Vapors can flow along surfaces to distant ignition source and flashback. Use water spray to blanket fire, cool fire exposed containers, and to flush non-ignited spills or vapors away from fire. Explosion hazard when exposed to heat, flame or oxidizers.

**5.3 Advice for firefighters**

Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

**5.4 Further information**

No data available

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye protection.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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

Absorb with inert material (vermiculite, sand). Ventilate, if necessary, site of spillage well to evaporate remaining liquid and dispel vapor. Do not flush to sewer. Always comply with local, state, and federal regulations.

**6.4 Reference to other sections**

See section 8. Exposure controls/personal protection

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

**Additional hazards when processed:** Handle empty containers with care because residual vapors are flammable.

**Precautions for safe handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only non-sparking tools. Avoid breathing vapors. Use only outdoors or in a well-ventilated area.

**Hygiene measures:** Wash exposed skin thoroughly after handling.

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

**Technical measures:** Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment.

**Storage conditions:** Keep in fireproof place. Keep container tightly closed.

**Incompatible products:** Strong oxidizers.

**Incompatible materials:** Sources of ignition, Direct sunlight, Heat sources.

**7.3 Specific end use(s)**  
None

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**8.2 Exposure controls**

**Appropriate engineering controls**

General industrial hygiene practice.

**Personal protective equipment**

**Eye/face protection**

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**

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

No special environmental precautions required.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

- |   |  |
|---|--|
| a) Appearance                                   | Form: liquid<br>Colour: Colourless to gold |
| b) Odour  | No data available                          |
| c) Odour Threshold                              | No data available                          |
| d) pH   | No data available                          |
| e) Melting point/freezing point                 | No data available                          |
| f) Initial boiling point and boiling range      | Approximately 77°C - Approximately 77°C    |
| g) Flash point                                  | Approximately 15.5°C                       |
| h) Evaporation rate                             | No data available                          |
| i) Flammability (solid, gas)                    | No data available                          |
| j) Upper/lower flammability or explosive limits | No data available                          |
| k) Vapour pressure                              | No data available                          |
| l) Vapour density                               | No data available                          |
| m) Relative density                             | No data available                          |

n)	Water solubility	No data available
o)	Partition coefficient: n-octanol/water	No data available
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

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

### 10.3 Possibility of hazardous reactions

Reacts vigorously with strong oxidizers and acids.

### 10.4 Conditions to avoid

Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed.

### 10.5 Incompatible materials

Oxidizers, platinum, Sodium, Potassium Dioxide, Bromine Pentafluoride, Acetyl Bromide, Acetyl Chloride, heat, sparks, open flame.

### 10.6 Hazardous decomposition products

No data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

Causes serious eye irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. 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 attention.

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

May cause genetic defects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Carcinogenicity

No data available

#### Reproductive toxicity

May damage fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF

exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Specific target organ toxicity - single exposure**

Causes damage to organs. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Specific target organ toxicity - repeated exposure**

Causes damage to organs through prolonged or repeated exposure. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

**Aspiration hazard**

No data available

**Additional Information**

No data available

**SECTION 12: Ecological information**

**12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

The substance does not fulfill the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6 Other adverse effects**

**Environmental precautions:** Avoid release to the environment.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information**

**14.1 UN number**

ADR/RID: - 1987

IMDG: - 1987

IATA: - 1987

**14.2 UN proper shipping name**

ADR/RID: ALCOHOLS, N.O.S. (ETHANOL, METHANOL)

IMDG: ALCOHOLS, N.O.S. (ETHANOL, METHANOL)

IATA: Alcohols, n.o.s. (Ethanol, Methanol)

**14.3 Transport hazard class(es)**

ADR/RID: - 3

IMDG: - 3

IATA: - 3

**14.4 Packaging group**

ADR/RID: - II

IMDG: - II

IATA: - II

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: Yes

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.**

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H340	May cause genetic defects.
H360	May damage fertility or the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.

#### **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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.