

# MATERIAL SAFETY DATA SHEET (MSDS)

## MATERIAL SAFETY DATA SHEET

### EM SCIENCE

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

---

**Manufacturer.....:**

EM SCIENCE  
A Division of EM Industries  
P.O. Box 70  
480 Democrat Road  
Gibbstown, N.J. 08027

**Preparation Date.:** 8/13/91

**Information Phone Number.:** 856-423-6300

**Hours:** Mon. to Fri. 8:30-5

**Chemtrec Emergency Number:** 800-424-9300

**Hours:** 24 hrs a day

**Catalog Number(s):**

DX1750

**Product Name:**

Dimethylglyoxime

**Synonyms:**

2,3-Butanedione Dioxime

**Chemical Family:**

**Formula:**

$\text{CH}_2\text{C}(\text{NOH})\text{C}(\text{NOH})\text{CH}_3$

**Molecular Weight.:**

116.12

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

---

Component	CAS #	Appr %
Dimethylglyoxime	95-45-4	100%

#### 3. HAZARDS IDENTIFICATION

---

**EMERGENCY OVERVIEW**

MAY BE HARMFUL IF SWALLOWED.

**Appearance:**

White powder

**POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)**

**Symptoms of Exposure:**

May be harmful if swallowed.

**Medical Cond. Aggravated by Exposure:**

Not available.

**Routes of Entry:**

Inhalation, ingestion

**Carcinogenicity:**

The material is not listed (IARC, NTP, OSHA) as cancer causing agent.

**4. FIRST AID MEASURES**

---

**Emergency First Aid:**

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.

Skin: Wash thoroughly with soap and water.

Eyes: Immediately flush thoroughly with water for at least 15 minutes.

Inhalation: Remove to fresh air; give artificial respiration if breathing has stopped.

Ingestion: If conscious, drink water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

**5. FIRE FIGHTING MEASURES**

---

**Flash Point (F):** N/A

**Flammable Limits LEL (%):** N/A

**Flammable Limits UEL (%):** N/A

**Extinguishing Media:**

Foam, Water spray

**Fire Fighting Procedures:**

Wear self-contained breathing apparatus.

**Fire & Explosion Hazards:**

Thermal decomposition produces toxic fumes.

**6. ACCIDENTAL RELEASE MEASURES**

---

**Spill Response:**

Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under Exposure / Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Take up and containerize for proper disposal as described under Disposal. Comply with Federal, State, and local regulations on reporting releases. Refer to Regulatory Information for reportable quantity and other regulatory data.

## 7. HANDLING AND STORAGE

---

### Handling & Storage:

1 container closed. Store away from heat and oxidizers. Do not breathe dust. Do not get in eyes, on skin, or on clothing.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

---

### ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:

#### Ventilation, Respiratory Protection, Protective Clothing, Eye Protection:

Material should be handled or transferred in an approved fume hood or with adequate ventilation. Protective gloves should be worn to prevent skin contact (Neoprene or equivalent) Safety glasses with side shields should be worn at all times.

#### Work/Hygenic Practices:

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

### EXPOSURE GUIDELINES

#### OSHA - PEL:

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
Dimethylglyoxime							

#### ACGIH - TLV:

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
Dimethylglyoxime							

If there are no exposure limit numbers listed in the Exposure Guidelines chart, this indicates that no OSHA or ACGIH exposure limits have been established.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

**Boiling Point (C 760 mmHg) :** N/A

**Melting Point (C) :** 242C

**Specific Gravity (H<sub>2</sub>O = 1) :** N/A

**Vapor Pressure (mm Hg) :** N/A

**Percent Volatile by vol (%) :** None

**Vapor Density (Air = 1) :** N/A

**Evaporation Rate (BuAc = 1) :** N/A

**Solubility in Water (%) :** Insoluble

**Appearance :**

White powder

## 10. STABILITY AND REACTIVITY

---

**Stability:** Yes

**Hazardous Polymerization:**

Does not occur

**Hazardous Decomposition:**

NO<sub>x</sub>, CO<sub>x</sub>

**Conditions to Avoid:**

Extreme heat

**Materials To Avoid:**

- Water
- Acids
- Bases
- Corrosives
- Oxidizers
- Other:

## 11. TOXICOLOGICAL INFORMATION

---

**Toxicity Data**

Orl-rat LDLo: 250 mg/kg

**Toxicological Findings:**

Tests on laboratory animals indicate material may produce adverse mutagenic effects.

Cited in Registry of Toxic Effects of Chemical Substances (RTECS)

## 12. DISPOSAL CONSIDERATIONS

---

**EPA Waste Numbers:**

**Treatment:**

Material does not have an EPA Waste number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished.

ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

## 13. TRANSPORT INFORMATION

---

**DOT Proper Shipping Name:**

non-regulated

**DOT ID Number :**

DOT

**14. REGULATORY INFORMATION**

---

**TSCA Statement:**

The CAS number of this product is listed on the TSCA Inventory.

Component	SARA EHS (302)	SARA EHS TPQ (lbs)	CERCLA RQ (lbs)
-----------	----------------------	--------------------------	-----------------------

---

 Dimethylglyoxime

Component	OSHA Floor List	SARA 313	DeMinimis for SARA 313 (%)
-----------	--------------------	-------------	----------------------------------

---

 Dimethylglyoxime

There is no information listed on the regulatory information chart, this indicates that the chemical is not covered by the applicable regulation listed.

**15. OTHER INFORMATION**

---

**Comments:**

None

**NFPA Hazard Ratings:**

Health : 2  
 Flammability : 1  
 Reactivity : 0  
 Special Hazards :

**Revision History:** 10/1/85 10/27/87 3/1/91

| = Revised Section

/A = Not Available

N/E = None Established

The statements contained herein are offered for informational purposes only and are based upon technical data that EM Science believes to be accurate. It is intended for use only by persons having the necessary technical skill and at their own discretion and risk. Since conditions and manner of use are outside our control, we make NO WARRANTY, EXPRESS OR IMPLIED, OR MERCHANTABILITY, FITNESS OR OTHERWISE.