

## Dimethylglyoxime

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Dimethylglyoxime
<b>Other Means of Identification</b>	2,3-Butanedionedioxime disodium salt, Diacetyldioxime
<b>Product Code(s)</b>	DI4710
<b>Product Family</b>	Organic crystalline solid
<b>Recommended Use</b>	Laboratory and industrial use.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	1482

### SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Flammable solid - Category 2; Acute toxicity (Oral) - Category 3

#### Label Elements



Signal Word:  
Danger

Hazard Statement(s):  
Flammable solid.  
Toxic if swallowed.

Precautionary Statement(s):  
Prevention:

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
Use explosion-proof electrical, ventilating, and lighting equipment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.

Response:  
IF SWALLOWED: Immediately call a POISON CENTRE or doctor.  
Rinse mouth.

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Storage:  
Store locked up.  
Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

#### Other Hazards

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
2,3-Butanedione, dioxime	95-45-4	90 - 100	2, 3- Butanedionedioxi me disodium salt, Diacetyldioxime	

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Remove source of exposure or move to fresh air.

##### Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If skin irritation occurs, get medical advice or attention.

##### Eye Contact

Rinse the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

##### Ingestion

Rinse mouth with water. Immediately call a Poison Centre or doctor.

##### First-aid Comments

Provide general supportive measures (comfort, warmth, rest). Treat symptomatically. Symptoms may be delayed.

#### Most Important Symptoms and Effects, Acute and Delayed

If swallowed: can burn the lips, tongue, throat and stomach.

#### Immediate Medical Attention and Special Treatment

##### Special Instructions

General advice, consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing Media

##### Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog. Special "alcohol resistant fire-fighting foams".

##### Unsuitable Extinguishing Media

None known.

#### Specific Hazards Arising from the Product

Flammable solid. Heating increases the release of toxic vapour.

Not known to generate any hazardous decomposition products in a fire. very toxic carbon monoxide, carbon dioxide;

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corrosive, oxidizing nitrogen oxides.

### Special Protective Equipment and Precautions for Fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full

protective gear. Move containers from fire area if it can be done without risk. Otherwise, use water in flooding quantities as a spray or fog to keep fire-exposed containers cool and absorb heat.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Eliminate all ignition sources. Use grounded, explosion-proof equipment. Remove or isolate incompatible materials as well as other hazardous materials.

### Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. Inform authorities if large amounts are involved.

### Methods and Materials for Containment and Cleaning Up

Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Flush spill area. Dike and recover contaminated water for appropriate disposal.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Avoid breathing in this product. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty. Wash hands thoroughly after handling this material.

### Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources. Store in a closed container.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
2,3-Butanedione, dioxime	Not established		Not established			

### Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles.

#### Respiratory Protection

For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

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<b>Appearance</b>	White crystalline powder.
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not available
<b>Melting Point/Freezing Point</b>	240 °C (464 °F) (melting); 240 °C (464 °F) (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	Not applicable
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	~ 0.01 kPa (0.08 mm Hg) at 25 °C
<b>Vapour Density (air = 1)</b>	Not available
<b>Relative Density (water = 1)</b>	Not available
<b>Solubility</b>	Practically insoluble in water; Not available (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); Not available (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Solid
<b>Molecular Weight</b>	116.12

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

### Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources.

### Incompatible Materials

Oxidizing agents (e.g. peroxides), strong acids (e.g. hydrochloric acid), reducing agents (e.g. hydroquinone).

### Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
2,3-Butanedione, dioxime	Not available	Not available	Not available

### Skin Corrosion/Irritation

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May cause skin irritation.

**Serious Eye Damage/Irritation**

May cause eye irritation.

**STOT (Specific Target Organ Toxicity) - Single Exposure**

**Inhalation**

May be harmful. May cause nose and throat irritation.

**Ingestion**

Toxic, can cause death.

**Aspiration Hazard**

No information was located.

**STOT (Specific Target Organ Toxicity) - Repeated Exposure**

No information was located.

**Respiratory and/or Skin Sensitization**

No information was located for respiratory sensitization. Not a skin sensitizer.

**Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
2,3-Butanedione, dioxime	Not Listed	Not designated	Not Listed	Not Listed

**Reproductive Toxicity**

**Development of Offspring**

Not known to harm the unborn child.

**Sexual Function and Fertility**

Not known to cause effects on sexual function or fertility.

**Effects on or via Lactation**

No information was located.

**Germ Cell Mutagenicity**

No information was located.

**Interactive Effects**

No information was located.

**SECTION 12. ECOLOGICAL INFORMATION**

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

**SECTION 14. TRANSPORT INFORMATION**

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	UN2926	Flammable solids, toxic, organic, n.o.s.	4.1, 6.1	III
Canadian TDG	UN2926	Flammable solids, toxic, organic, n.o.s.	4.1, 6.1	III

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

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## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

##### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL.

#### USA

##### Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** Alphachem Limited

**Phone No.** (905)-821-2995

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**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).  
GESTIS Substance Database (included by CCOHS).

**Disclaimer** This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.

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