Material Safety Data Sheet
Dimethylglyoxime

MSDS# 07225

Section 1 - Chemical Product and Company Identification

MSDS Name: Dimethylglyoxime
Catalog Numbers: AC172000000, AC172001000, AC172005000, AC408330000, AC408330250, AC408331000, AC408331000, AC408335000, D62-100
Synonyms: 2,3-Butanedione dioxime.

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

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CAS#: 95-45-4
Chemical Name: Dimethylglyoxime
%: 99+
EINECS#: 202-420-1
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Hazard Symbols: XN F
Risk Phrases: 11 20/21/22

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Flammable solid. Harmful if swallowed, inhaled, or absorbed through the skin. May cause eye, skin, and respiratory tract irritation. Target Organs: None known.

Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation. Harmful if absorbed through the skin.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation: Harmful if inhaled. May cause respiratory tract irritation.
Chronic: Laboratory experiments have resulted in mutagenic effects.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Do not induce vomiting. Get medical aid immediately. Call a poison control center.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Containers may explode in the heat of a fire. Flammable solid.

Extinguishing Media:
- Use water spray to cool fire-exposed containers. Use water spray, dry chemical, carbon dioxide, or appropriate foam.
- Autoignition Temperature: Not applicable.
- Flash Point: Not applicable.
- Explosion Limits: Not available
  - Lower:
  - Upper:
- NFPA Rating: health: 2; flammability: 3; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
- Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section).
- Avoid generating dusty conditions. Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: precautionary measures against static discharges. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethylglyoxime</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Dimethylglyoxime: None listed

Engineering Controls:
- Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Powder
- Color: white
- Odor: perceptible odor
- pH: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: 239 - 242 deg C (decom)
Decomposition Temperature: Not available
Solubility in water: Slightly soluble
Specific Gravity/Density: Not available.
Molecular Formula: C4H8N2O2
Molecular Weight: 116.12

Section 10 - Stability and Reactivity
Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, ignition sources, dust generation, temperatures above 65°C.
Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, strong acids.
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information
RTECS#: CAS# 95-45-4: EK2975000
LD50/LC50: RTECS: Not available. Other: Oral, rat: LDLo = 250
Carcinogenicity: Dimethylglyoxime - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information
Other: Do not empty into drains.

Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information
US DOT
Shipping Name: FLAMMABLE SOLID, ORGANIC, N.O.S.
Hazard Class: 4.1
UN Number: UN1325
Packing Group: III
Canada TDG
Shipping Name: FLAMMABLE SOLID, ORGANIC, N.O.S.
Hazard Class: 4.1
UN Number: UN1325
Packing Group: III

Section 15 - Regulatory Information
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN F
Risk Phrases:
R 11 Highly flammable.
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
Safety Phrases:
S 16 Keep away from sources of ignition - No smoking.
S 36/37 Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)
CAS# 95-45-4: Not available

Canada

CAS# 95-45-4 is listed on Canada's DSL List
Canadian WHMIS Classifications: B4, D1B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS# 95-45-4 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 95-45-4 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 3/12/1999
Revision #6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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