## 1. Identification

**Product Name**  
Dimethylglyoxime, disodium salt octahydrate

**Cat No.**  
AC408340000; AC408340010; AC408341000; AC408342500

**Synonyms**  
2,3-Butanedione Dioxime Disodium Salt.

**Recommended Use**  
Laboratory chemicals.

**Uses advised against**  
No Information available

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

<table>
<thead>
<tr>
<th>Company</th>
<th>Entity / Business Name</th>
<th>Emergency Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisher Scientific</td>
<td>Acros Organics</td>
<td>For information <strong>US</strong> call: 001-800-ACROS-01</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Europe</strong> call: +32 14 57 52 11</td>
</tr>
<tr>
<td>One Reagent Lane</td>
<td>One Reagent Lane</td>
<td>Emergency Number <strong>US</strong>:001-201-796-7100 /</td>
</tr>
<tr>
<td>Tel: (201) 796-7100</td>
<td></td>
<td>CHEMTREC Tel. No.<strong>US</strong>:001-800-424-9300 /</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Europe</strong>:001-703-527-3887</td>
</tr>
</tbody>
</table>

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Skin Corrosion/irritation</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

#### Label Elements

**Signal Word**  
Warning

**Hazard Statements**  
Causes skin irritation  
Causes serious eye irritation

![Danger symbol]

#### Precautionary Statements

**Prevention**  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection
Skin
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Eyes
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 advice/attention

Hazards not otherwise classified (HNOC)
May form combustible dust concentrations in air

3. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,3-Butanedione, dioxime, disodium salt, octahydrate</td>
<td>75006-64-3</td>
<td>&gt;95</td>
</tr>
<tr>
<td>2,3-Butanedione, dioxime, disodium salt</td>
<td>60908-54-5</td>
<td>-</td>
</tr>
</tbody>
</table>

4. First-aid measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

Inhalation
Remove from exposure, lie down. Move to fresh air. Obtain medical attention.

Ingestion
Clean mouth with water. Get medical attention.

Most important symptoms/effects
No information available.

Notes to Physician
Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media
Water spray. Carbon dioxide (CO₂). Dry chemical. Use water spray to cool unopened containers. chemical foam.

Unsuitable Extinguishing Media
No information available

Flash Point
No information available

Method -
No information available

Autoignition Temperature
No information available

Explosion Limits
No data available

Upper
No data available

Lower
No data available

Sensitivity to Mechanical Impact
No information available

Sensitivity to Static Discharge
No information available

Specific Hazards Arising from the Chemical
Dust can form an explosive mixture in air.

Hazardous Combustion Products
Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO₂)

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Dimethylglyoxime, disodium salt octahydrate

Revision Date 10-Feb-2015

NFPA

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions
See Section 12 for additional ecological information.

Methods for Containment and Clean Up
Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. HANDLING AND STORAGE

Handling
Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist.

Storage
Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures
Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection
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 and Body Protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State
Powder Solid

Appearance
White

Odor
Odorless

Odor Threshold
No information available

pH
No information available

Melting Point/Range
No data available

Boiling Point/Range
No information available

Flash Point
No information available

Evaporation Rate
No information available

Flammability (solid, gas)
No information available

Flammability or explosive limits

Upper
No data available

Lower
No data available

Vapor Pressure
No information available

Vapor Density
No information available

Relative Density
No information available

Solubility
No information available

Partition coefficient; n-octanol/water
No data available

Autoignition Temperature
No information available
Dimethylglyoxime, disodium salt octahydrate

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Decomposition Temperature No information available
Viscosity No information available
Molecular Formula C4 H6 N2 Na2 O2 . 8 H2 O
Molecular Weight 304.19

10. Stability and reactivity

Reactive Hazard None known, based on information available
Stability Stable under normal conditions. heat sensitive.
Conditions to Avoid Avoid dust formation. Incompatible products.
Incompatible Materials Strong oxidizing agents
Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)
Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product
Component Information Toxicologically Synergistic Products No information available
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available
Sensitization No information available
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
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</thead>
<tbody>
<tr>
<td>2,3-Butanedione, dioxime, disodium salt, octahydrate</td>
<td>75006-64-3</td>
<td>Not listed</td>
<td>Not listed</td>
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<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Mutagenic Effects No information available
Reproductive Effects No information available.
Developmental Effects No information available.
Teratogenicity No information available.
STOT - single exposure None known
STOT - repeated exposure None known
Aspiration hazard No information available

Symptoms / effects, both acute and delayed No information available
Endocrine Disruptor Information No information available
Other Adverse Effects The toxicological properties have not been fully investigated.
12. Ecological information

Ecotoxicity
Do not empty into drains.

Persistence and Degradability  No information available
Bioaccumulation/ Accumulation  No information available.
Mobility  No information available.

13. Disposal considerations

Waste Disposal Methods  Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT  Not regulated
TDG  Not regulated
IATA  Not regulated
IMDG/IMO  Not regulated

15. Regulatory information

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
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<tr>
<td>2,3-Butanedione, dioxime, disodium salt, octahydrate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2,3-Butanedione, dioxime, disodium salt</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>262-523-2</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)  Not applicable
SARA 313  Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard  Yes
Chronic Health Hazard  No
Fire Hazard  Yes
Sudden Release of Pressure Hazard  No
Reactive Hazard  No

Clean Water Act  Not applicable
Dimethylglyoxime, disodium salt octahydrate

Clean Air Act
Not applicable

OSHA Occupational Safety and Health Administration
Not applicable

CERCLA
Not applicable

California Proposition 65
This product does not contain any Proposition 65 chemicals

State Right-to-Know
Not applicable

U.S. Department of Transportation
Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations
Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class
D2B  Toxic materials
B4  Flammable solid

16. Other information
Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 08-Nov-2010
Revision Date 10-Feb-2015
Print Date 10-Feb-2015
Revision Summary
This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer
The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS