SAFETY DATA SHEET

1. Identification

Product Name: Sodium oxalate
Cat No.: AC446961000; AC446965000
Synonyms: di-Sodium oxalate; Oxalic acid, sodium salt
Recommended Use: Laboratory chemicals.
Uses advised against: No Information available

Details of the supplier of the safety data sheet

Company: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Entity / Business Name: Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number
For information US call: 001-800-ACROS-01
/ Europe call: +32 14 57 52 11
Emergency Number US: 001-201-796-7100/
Europe: +32 14 57 52 99
CHEMTREC Tel. No.US: 001-800-424-9300 /
Europe: 001-703-527-3887

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>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>Category 4</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Label Elements

Signal Word
Warning

Hazard Statements
Harmful if swallowed
Harmful in contact with skin
Causes eye irritation

Precautionary Statements
3. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium oxalate</td>
<td>62-76-0</td>
<td>&gt;95</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**: Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Obtain medical attention.
- **Ingestion**: Do not induce vomiting. Call a physician or Poison Control Center immediately.
- **Most important symptoms/effects**: No information available.
- **Notes to Physician**: Treat symptomatically

5. Fire-fighting measures

- **Suitable Extinguishing Media**: Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.
- **Unsuitable Extinguishing Media**: No information available
- **Flash Point Method**:
  - **Flash Point**: No information available
  - **Method**: No information available
- **Autoignition Temperature**: No information available
- **Explosion Limits**:
  - **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**: Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

- **Hazardous Combustion Products**: Carbon monoxide (CO) Carbon dioxide (CO₂) Sodium oxides

- **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.
6. Accidental release measures

Personal Precautions
Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.

Environmental Precautions
Avoid release to the environment. 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. Avoid dust formation.

7. Handling and storage

Handling
Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation.

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

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. Ensure that eyewash stations and safety showers are close to the workstation location.

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 8 @ 20°C 30 g/l aq.sol
Melting Point/Range 250 - 270 °C / 482 - 518 °F
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 negligible
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
 Decomposition temperature 250°C
Viscosity No information available
Molecular Formula C2 Na2 O4
Sodium oxalate

Molecular Weight 134

10. Stability and reactivity

Reactive Hazard None known, based on information available
Stability Stable under normal conditions. Hygroscopic.
Incompatible Materials Strong oxidizing agents, Strong acids
Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO₂), Sodium oxides
Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity
Component Information
Toxicologically Synergistic Products No information available
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Irritation Irritating to eyes
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>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium oxalate</td>
<td>62-76-0</td>
<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. See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity Do not empty into drains.

<table>
<thead>
<tr>
<th>Component</th>
<th>Freshwater Algae</th>
<th>Freshwater Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium oxalate</td>
<td>Not listed</td>
<td>LC50: 630 mg/L/96h (Danio rerio)</td>
<td>Not listed</td>
<td>EC50: 398 mg/L/24h</td>
</tr>
</tbody>
</table>

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>
</thead>
<tbody>
<tr>
<td>Sodium oxalate</td>
<td>X</td>
<td>X</td>
<td></td>
<td>200-550-3</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</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: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

Clean Water Act: Not applicable
Sodium oxalate

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
Mexico - Grade
No information available

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

16. Other information

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

Creation Date
08-May-2014
Revision Date
08-May-2014
Print Date
08-May-2014
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