

SAFETY DATA SHEET

Sulfox-108

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Trade name: Sulfox-108

Product class: Water treatment compounds

Product description: Odor control compound

Company: SYNTHEX ORGANICS, LLC
4601 Cortland Avenue
Altoona, PA 16601
United States

Telephone: 814-941-8375

Telefax: 814-941-1031

Emergency telephone number: Call CHEMTREC Day or Night
1-800-424-9300 / +1 703-527-3887 CCN809665

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:



GHS05 Corrosion

H314 Causes severe skin burns and eye damage.



GHS07

H302 Harmful if swallowed.

GHS label elements: The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms:



GHS05



GHS07

SAFETY DATA SHEET
Sulfox-108

HAZARDS IDENTIFICATION CONT

Appearance and odor: Colorless liquid with amine odor

Medical conditions aggravated by exposure: Skin contact may aggravate an existing dermatitis. Inhalation of material may aggravate asthma and inflammatory or fibrotic pulmonary disease.

Potential health effects

Eye contact: Contact causes eye irritation, experienced as discomfort or pain, excess blinking and tear production, marked excess redness and swelling of the conjunctiva, and chemical burns of the cornea.

Skin contact: Contact causes skin irritation and potential tissue destruction. Prolonged or widespread contact may result in the absorption of harmful amounts of material that could be toxic.

Ingestion: Can cause irritation or chemical burns of the mouth, throat, esophagus, and stomach with possible pain in the mouth, throat, chest, and abdomen. Can cause nausea, vomiting, diarrhea, dizziness, drowsiness, thirst, faintness, weakness, and possible circulatory collapse.

Inhalation: May cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, coughing, and possible chest pain. Prolonged overexposure may cause injury to the respiratory tract.

Repeated overexposure: Repeated overexposure may cause damage to the kidneys and liver.

3. COMPOSITION / INFORMATION OF INGREDIENTS

Chemical Name	CAS #	Weight %	OSHA PEL	ACGIH TLV
Monoethanolamine	141-43-5	20-40	6.0 mg/m ³	7.5 mg/m ³

4. FIRST AID MEASURES

Inhalation: If inhalation occurs, remove victim to fresh air. If breathing stops, give artificial respiration. If breathing is difficult, have a trained medical person administer oxygen. Seek medical aid.

Skin: Immediately wash skin with plenty of soap and water for at least 15 minutes, while removing contaminated clothing. Seek medical aid. Wash clothing before reuse.

Eye: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eye lids to ensure complete rinsing. DO NOT remove contact lenses. Seek medical attention immediately.

Oral: If swallowed, do NOT induce vomiting. If victim is conscious and alert, give large quantities of milk or water. Seek medical aid immediately. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

SEE SECTION 9 FOR FLAMMABLE PROPERTIES

Extinguishing media: Use water spray or apply alcohol type or all-purpose type foam while using manufacturers recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires.

Fire fighting measures: Do not direct a solid stream of water or foam into burning molten material; this may cause splattering and spread the fire. Use a self-contained breathing apparatus, eye protection, and protective clothing.

Fire and explosion hazards: During the fire, oxides of nitrogen may be evolved.

SAFETY DATA SHEET
Sulfox-108

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Contain spilled material if possible. Use adsorbent materials to soak up non-recovered product. Collect in suitable and properly labeled containers. See section 13 for disposal information.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Do not swallow. Use with adequate ventilation. Wash thoroughly after handling. Keep containers closed when not in use.

Storage: Store product in a cool, dry, well-ventilated area away from incompatible materials. Protect product containers from physical damage. Since empty containers retain product residues (vapors, liquid), observe all warnings and precautions listed for the product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Use local and/or general exhaust ventilation to maintain airborne concentrations below irritating levels or airborne exposure limits, whichever is lower.

Personal Protective Equipment

Eye protection: Chemical splash goggles and face shield.

Skin protection: Chemical resistant gloves and impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection: If airborne concentrations exceed published exposure limits, use an air purifying respirator in accordance with OSHA respiratory protection requirements (29 CFR 1910.134).

Work practices: An eye wash station and safety shower should be accessible in the immediate area of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid

Color: Clear, colorless

Odor: Amine smell

pH: 11.5

Freeze point: Not available.

Boiling point: 212 °F

Vapor pressure: Like water.

Vapor density: Like water.

Solubility in water: Complete.

Specific gravity: 1.01 g/mL

SAFETY DATA SHEET
Sulfox-108

10. STABILITY AND REACTIVITY

Chemical stability: Stable under ordinary conditions of use and storage.

Conditions to avoid: Temperature extremes and incompatibles. Do not evaporate to dryness.

Incompatibilities: Strong acids and bases.

Hazardous polymerization: Hazardous polymerization will not occur.

Decomposition products: Thermal decomposition or combustion may produce oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

On ingredients:

Test Material	Oral LD50 (rat)	Dermal LD50 (rabbit)*	Inhalation LC50 (rat)**
Monoethanolamine	1.13 ml/Kg	2.64 mg/Kg	Not available

*A repeated insult patch test was carried out on human volunteers. No skin reaction was observed, indicating a lack of human sensitization to the material.

**In substantially saturated vapor studies, 6 hour exposure static generation method male and female rats showed no mortality.

12. ECOLOGICAL INFORMATION

On ingredients:

Test	Monoethanolamine
Bacterial Inhibition; IC50	700-2000 mg/L
Daphnia, 48 Hour LC50	33-93 mg/L
Fathead Minnow, 96 Hour LC50	125-206 mg/L
THODCARB (THOD) – Calculated	1.31 mg/mg
THODNITR (THOD) – Calculated	0.79 mg/mg
Chemical Oxygen Demand - Measured	1.54 mg/mg
Octanol/Water Partition Coefficient - Measured	-1.31
BOD (% Oxygen Consumption)	Day 5: 52 - 60%
BOD (% Oxygen Consumption)	Day 10: 73 - 75%
BOD (% Oxygen Consumption)	Day 20: 90 - 100%

Passes OECD tests for being classified as readily biodegradable.

Toxicity to daphnia magna (whole product): LC50 (Daphnia magna (Water flea)): >100 mg/L
 Exposure time: 48 h
 Test substance: Water Accommodated Fraction
 Method: OECD Test Guideline 202
 Remarks: Based on data from similar materials

SAFETY DATA SHEET
Sulfox-108

13. DISPOSAL CONSIDERATIONS

RCRA Status: Discarded product, as sold, would be considered a RCRA Hazardous Waste. Whatever cannot be salvaged or recycled should be handled a hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Dispose of in accordance with local, state, and federal regulations.

14. TRANSPORTATION REGULATIONS

DOT Classification:
Proper Shipping Name: Ethanolamine
Primary Hazard Class/Division: 8
UN Number: UN2491
Packing Group: III
Label: Corrosive

15. REGULATORY INFORMATION

OSHA Hazard Communication Status: Hazardous

TSCA: The ingredients of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

Canada (DSL): All components of this product are either listed on the inventory or are exempt from listing.

CERCLA: EPA Hazardous Substances (40 CFR 302):

<u>Chemical Name</u>	<u>CERCLA Reportable Quantity (RQ)</u>
----------------------	--

SARA TITLE III (Sections 302, 311, 312, and 313):

Section 302 Extremely Hazardous Substances (40 CFR 355):

<u>Chemical Name</u>	<u>CAS#</u>	<u>RQ</u>	<u>TPQ</u>
None			

Section 311 and 312 Health and Physical Hazards:

<u>Immediate</u>	<u>Delayed</u>	<u>Fire</u>	<u>Pressure</u>	<u>Reactivity</u>
yes	yes	no	no	no

Section 313 Toxic Chemicals (40 CFR 372):

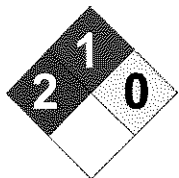
<u>Chemical Name</u>	<u>CAS Number</u>	<u>Percent by Weight</u>
----------------------	-------------------	--------------------------

SAFETY DATA SHEET
Sulfox-108

16. OTHER INFORMATION

NFPA:

Health: 2
Flammability: 1
Instability: 0



HMIS:

Health: 2
Flammability: 1
Reactivity: 0

HEALTH	2
FLAMMABILITY	1
REACTIVITY	0

PERSONAL
PROTECTION

The preceding information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change, and the conditions of handling and use or misuse are beyond our control, Synthex Organics, LLC. makes no warranty, either express or implied, with respect to the completeness or continuing accuracy of the information contained herein, and disclaims all liability for reliance thereon. User should satisfy himself that he has all current data relevant to his particular use.

Revised October 13, 2016, C. Vincent