

# **SAFETY DATA SHEET**

Creation Date 16-Nov-2010 Revision Date 03-Apr-2018 Revision Number 4

1. Identification

Product Name 2-Mercaptopyridine-N-oxide, sodium salt, 40 w/w % aqueous solution

Cat No.: AC257740000; AC257740010; AC257740025; AC257740050;

AC257741000; AC257742500

**CAS-No** 3811-73-2

Synonyms Sodium omadine; N-Hydroxy-2-pyridinethione, sodium salt; 2-Pyridinethiol-1-oxide, sodium

sal

Recommended Use Laboratory chemicals.

Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Fisher Scientific Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 Fair Lawn, NJ 07410

Tel: (201) 796-7100

**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)

Acute oral toxicity
Category 4
Acute dermal toxicity
Category 4
Acute Inhalation Toxicity - Vapors
Category 4
Skin Corrosion/irritation
Category 2
Serious Eye Damage/Eye Irritation
Category 2

## **Label Elements**

## Signal Word

Warning

#### **Hazard Statements**

Harmful if swallowed Harmful in contact with skin Causes skin irritation Causes serious eye irritation Harmful if inhaled



#### **Precautionary Statements**

# Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

#### Skin

IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor/physician if you feel unwell

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

#### Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

## **Disposal**

Dispose of contents/container to an approved waste disposal plant

# Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

## Other hazards

Stench.

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Water	7732-18-5	60
Sodium pyridithione	3811-73-2	40

# 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Inhalation** Move to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and

effects

Treat symptomatically Notes to Physician

Fire-fighting measures

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. **Suitable Extinguishing Media** 

None reasonably foreseeable.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available Method -No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

No data available Upper Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### Specific Hazards Arising from the Chemical

Do not allow run-off from fire fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO2) Sulfur 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.

NFPA

Health	Flammability	Instability	Physical hazards
2	1	0	N/A

# Accidental release measures

**Personal Precautions Environmental Precautions**  Use personal protective equipment. Ensure adequate ventilation.

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities

should be advised if significant spillages cannot be contained.

Methods for Containment and Clean Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Up

	7. Handling and storage
Handling	Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure **Exposure Guidelines** 

limitsestablished by the region specific regulatory bodies.

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations **Engineering Measures** 

and safety showers are close to the workstation location.

## Personal Protective Equipment

**Eye/face Protection** Tightly fitting safety goggles. Face-shield.

Skin and body protection Long sleeved clothing.

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 StateLiquidAppearanceAmberOdorStench

Odor Threshold No information available

**pH** 8.5-10.5 @ 25°C

 Melting Point/Range
 -30 - -25 °C / -22 - -13 °F

 Boiling Point/Range
 109 °C / 228.2 °F @ 760 mmHg

Flash Point No information available Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor Pressure19 mmHg @ 25 °C

Vapor Density 5.7 Specific Gravity 1.220

Specific Gravity 1.220
Solubility Soluble in water

Partition coefficient; n-octanol/water

Autoignition Temperature

Decomposition Temperature

Viscosity

No data available

No information available

No information available

No information available

Molecular Formula C5 H4 N Na O S

Molecular Weight 149.12

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Sulfur oxides

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

# 2-Mercaptopyridine-N-oxide, sodium salt, 40 w/w % aqueous solution

 Oral LD50
 Category 4. ATE = 1500 mg/kg.

 Dermal LD50
 Category 4. ATE = 1800 mg/kg.

 Mist LC50
 Category 4. ATE = 2.8 mg/L/4h mg/l.

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	Not listed	Not listed
Sodium pyridithione	870 mg/kg (Mouse)	Not listed	1.1 mg/L/4h

**Toxicologically Synergistic** 

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

 Irritation
 Irritating to eyes and skin

 Sensitization
 No information available

**Carcinogenicity**The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed				
Sodium pyridithione	3811-73-2	Not listed				

Mutagenic Effects No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure**STOT - repeated exposure
None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

**Endocrine Disruptor Information** No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

# 12. Ecological information

#### **Ecotoxicity**

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium pyridithione	Not listed	EC50 = 0.00264 mg/L 96h	Not listed	EC50 = 0.0088 mg/L 48 h

Persistence and Degradability

Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Will likely be mobile in the environment due to its water solubility.

# 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

UN-No UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard Class 9
Packing Group III

TDG

UN-No UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard Class 9
Packing Group III

<u>IATA</u>

**UN-No** UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard Class 9
Packing Group III

IMDG/IMO

UN-No UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard Class 9
Packing Group III

# 15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

#### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	<b>ENCS</b>	AICS	IECSC	KECL
Water	Х	Χ	-	231-791-2	-		Χ	-	Χ	Х	Χ
Sodium pyridithione	Х	Χ	-	223-296-5	-		Χ	Χ	Χ	Х	Χ

#### 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 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Not applicable

Clean Air Act

Not applicable

**OSHA** Occupational Safety and Health Administration

# 2-Mercaptopyridine-N-oxide, sodium salt, 40 w/w % aqueous solution

Not applicable

CERCLA Not applicable

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

# U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-

# **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

	16. Other information	
Prepared By	Regulatory Affairs	

Prepared By Regulatory Affairs
Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

 Creation Date
 16-Nov-2010

 Revision Date
 03-Apr-2018

 Print Date
 03-Apr-2018

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 in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

# **End of SDS**