

## SAFETY DATA SHEET

Creation Date 27-Nov-2010

Revision Date 22-Mar-2018

Revision Number 1

### 1. Identification

**Product Name** Sodium hydrosulfite, technical grade

**Cat No. :** 33381

**CAS-No** 7775-14-6  
**Synonyms** Sodium dithionite

**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

Alfa Aesar  
Thermo Fisher Scientific Chemicals, Inc.  
30 Bond Street  
Ward Hill, MA 01835-8099  
Tel: 800-343-0660  
Fax: 800-322-4757  
**Email:** tech@alfa.com  
www.alfa.com

##### **Emergency Telephone Number**

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.  
After normal business hours, call Carechem 24 at (866) 928-0789.

### 2. Hazard(s) identification

#### Classification

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

Self-heating substances and mixtures  
Acute oral toxicity

Category 1  
Category 4

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Self-heating; may catch fire  
Harmful if swallowed



**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Keep cool. Protect from sunlight  
Wear protective gloves/protective clothing/eye protection/face protection

**Ingestion**

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

**Storage**

Maintain air gap between stacks/pallets  
Store away from other materials

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Contact with acids liberates toxic gas

### 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Sodium dithionite	7775-14-6	>85

### 4. First-aid measures

<b>General Advice</b>	If symptoms persist, call a physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
<b>Inhalation</b>	Move to fresh air. Obtain medical attention. If not breathing, give artificial respiration.
<b>Ingestion</b>	Do not induce vomiting. Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
<b>Most important symptoms and effects</b>	No information available.
<b>Notes to Physician</b>	Treat symptomatically

### 5. Fire-fighting measures

<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	Not applicable >80 °C / >176 °F
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Self-heating; exposure to air may cause substance to self-heat without an energy supply.

**Hazardous Combustion Products**

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**  
3

**Flammability**  
3

**Instability**  
2

**Physical hazards**  
N/A

**6. Accidental release measures****Personal Precautions****Environmental Precautions**

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Should not be released into the environment. Do not flush into surface water or sanitary sewer system. 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. Keep in suitable, closed containers for disposal.

**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. Avoid dust formation.

**Storage**

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

**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**

Tightly fitting safety goggles.

**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 State**

Powder Solid

**Appearance**

White

**Odor**

rotten-egg like

**Odor Threshold**

No information available

**pH**

8-9.5 50 g/l aq.sol

**Melting Point/Range**

300 °C / 572 °F

**Boiling Point/Range**

No information available

**Flash Point**

No information available

**Evaporation Rate**

Not applicable

**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	Not applicable
Specific Gravity	1.4
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	Not applicable >80 °C / >176 °F
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	Na <sub>2</sub> O <sub>4</sub> S <sub>2</sub>
Molecular Weight	174.1

## 10. Stability and reactivity

<b>Reactive Hazard</b>	Yes
<b>Stability</b>	Stable under normal conditions. Moisture sensitive. Strong reducing agent. Fire and explosion risk in contact with oxidizing agents.
<b>Conditions to Avoid</b>	Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water.
<b>Incompatible Materials</b>	Acids, Oxidizing agents
<b>Hazardous Decomposition Products</b>	Sulfur oxides
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	Contact with acids liberates toxic gas.

## 11. Toxicological information

**Acute Toxicity****Product Information****Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium dithionite	LD50 = 2500 mg/kg ( Rat )	>2 g/kg ( Rat )	>5.5 mg/L/4h ( Rat )

**Toxicologically Synergistic Products** No information available

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

<b>Irritation</b>	Irritating to eyes
<b>Sensitization</b>	No information available
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium dithionite	7775-14-6	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

<b>STOT - repeated exposure</b>	None known
<b>Aspiration hazard</b>	No information available
<b>Symptoms / effects, both acute and delayed</b>	No information available
<b>Endocrine Disruptor Information</b>	No information available
<b>Other Adverse Effects</b>	The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains. The product contains following substances which are hazardous for the environment. Harmful to aquatic organisms. Contains a substance which is:

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium dithionite	EC50: = 120 mg/L, 72h (Desmodesmus subspicatus) EC50: = 87 mg/L, 96h (Desmodesmus subspicatus)	LC50: 46 - 68 mg/L, 96h static (Leuciscus idus)	EC50 = 107 mg/L 17 h	EC50: = 98 mg/L, 48h (Daphnia magna Straus)

<b>Persistence and Degradability</b>	Persistence is unlikely
<b>Bioaccumulation/ Accumulation</b>	No information available.
<b>Mobility</b>	Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Sodium dithionite	-4.7

## 13. Disposal considerations

<b>Waste Disposal Methods</b>	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

<b>UN-No</b>	UN1384
<b>Proper Shipping Name</b>	SODIUM DITHIONITE
<b>Hazard Class</b>	4.2
<b>Packing Group</b>	II

### TDG

<b>UN-No</b>	UN1384
<b>Proper Shipping Name</b>	SODIUM DITHIONITE
<b>Hazard Class</b>	4.2
<b>Packing Group</b>	II

### IATA

<b>UN-No</b>	UN1384
<b>Proper Shipping Name</b>	Sodium dithionite
<b>Hazard Class</b>	4.2
<b>Packing Group</b>	II

### IMDG/IMO

<b>UN-No</b>	UN1384
<b>Proper Shipping Name</b>	Sodium dithionite (Sodium hydrosulphite)
<b>Hazard Class</b>	4.2
<b>Packing Group</b>	II

## 15. Regulatory information

### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Sodium dithionite	X	X	-	231-890-0	-		X	X	X	X	X

#### 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**  
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
Sodium dithionite	X	X	X	-	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 contains the following DHS chemicals:

Component	DHS Chemical Facility Anti-Terrorism Standard
Sodium dithionite	2000 lb STQ

### Other International Regulations

**Mexico - Grade** No information available

---

## 16. Other information

<b>Prepared By</b>	Health, Safety and Environmental Department Email: tech@alfa.com www.alfa.com
<b>Creation Date</b>	27-Nov-2010
<b>Revision Date</b>	22-Mar-2018
<b>Print Date</b>	22-Mar-2018
<b>Revision Summary</b>	SDS authoring systems update, replaces ChemGes SDS No. 91.

### 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**

## SAFETY DATA SHEET

Creation Date 26-Nov-2010

Revision Date 22-Mar-2018

Revision Number 1

### 1. Identification

**Product Name** Sodium selenate

**Cat No. :** 12613

**CAS-No** 13410-01-0  
**Synonyms** Selenic acid, disodium salt.; Disodium selenate

**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

Alfa Aesar  
Thermo Fisher Scientific Chemicals, Inc.  
30 Bond Street  
Ward Hill, MA 01835-8099  
Tel: 800-343-0660  
Fax: 800-322-4757  
**Email:** tech@alfa.com  
www.alfa.com

##### **Emergency Telephone Number**

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.  
After normal business hours, call Carechem 24 at (866) 928-0789.

### 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 1
Acute Inhalation Toxicity - Dusts and Mists	Category 3
Specific target organ toxicity - (repeated exposure)	Category 2
Target Organs - Kidney, Heart, Liver.	

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Fatal if swallowed  
Toxic if inhaled  
May cause damage to organs through prolonged or repeated exposure



**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

**Response**

Get medical attention/advice if you feel unwell

**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

**Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

**Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

**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

### 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Sodium selenate	13410-01-0	>95

### 4. First-aid measures

**General Advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Eye Contact**

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**Inhalation**

Move to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

**Ingestion**

Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Most important symptoms and effects**

None reasonably foreseeable.

**Notes to Physician**

Treat symptomatically

## 5. Fire-fighting measures

**Unsuitable Extinguishing Media** No information available

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

**Autoignition Temperature**

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

**Hazardous Combustion Products**

None known

**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. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**

**Health**  
4

**Flammability**  
0

**Instability**  
1

**Physical hazards**  
N/A

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**Environmental Precautions** 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 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. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe vapors/dust. Do not ingest.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Sodium selenate	TWA: 0.2 mg/m <sup>3</sup>	(Vacated) TWA: 0.2 mg/m <sup>3</sup>	IDLH: 1 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures** Use only under a chemical fume hood. 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** 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

<b>Physical State</b>	Powder Solid
<b>Appearance</b>	White
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	No information available
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	Not applicable
<b>Flammability (solid,gas)</b>	No information available
<b>Flammability or explosive limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	Not applicable
<b>Specific Gravity</b>	No information available
<b>Solubility</b>	Soluble in water
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	Not applicable
<b>Molecular Formula</b>	Na <sub>2</sub> O <sub>4</sub> Se
<b>Molecular Weight</b>	188.94

### 10. Stability and reactivity

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Hygroscopic.
<b>Conditions to Avoid</b>	Incompatible products. Exposure to moist air or water.
<b>Incompatible Materials</b>	Acids
<b>Hazardous Decomposition Products</b>	None under normal use conditions
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

### Acute Toxicity

#### Product Information

##### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium selenate	1.6 mg/kg ( Rat )	Not listed	Not listed

**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.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium selenate	13410-01-0	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** Ames test: positive.

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known  
**STOT - repeated exposure** Kidney Heart Liver

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** Tumorigenic effects have been reported in experimental animals.

## 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 selenate	Not listed	Pimephales promelas: EC50 = 0.69 mg/L/96h	Not listed	EC50 = 0.39 mg/L/48h

**Persistence and Degradability** Soluble in water

**Bioaccumulation/ Accumulation** No information available.

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

Component	log Pow
Sodium selenate	5

## 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	UN2630
Proper Shipping Name	SELENATES
Proper technical name	(SODIUM SELENATE)
Hazard Class	6.1
Packing Group	I

### TDG

UN-No	UN2630
Proper Shipping Name	SELENATES
Hazard Class	6.1
Packing Group	I

### IATA

UN-No	UN2630
Proper Shipping Name	SELENATES
Hazard Class	6.1
Packing Group	I

### IMDG/IMO

UN-No	UN2630
Proper Shipping Name	SELENATES
Hazard Class	6.1
Packing Group	I

## 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	ENCS	AICS	IECSC	KECL
Sodium selenate	X	X	-	236-501-8	-		X	X	X	X	X

#### 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

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Sodium selenate	13410-01-0	>95	1.0

SARA 311/312 Hazard Categories See section 2 for more information

### CWA (Clean Water Act)

Component	CWA - Hazardous	CWA - Reportable	CWA - Toxic Pollutants	CWA - Priority Pollutants
-----------	-----------------	------------------	------------------------	---------------------------

	Substances	Quantities		
Sodium selenate	-	-	X	-

**Clean Air Act**

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Sodium selenate	X		-

OSHA Occupational Safety and Health Administration

Not applicable

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium selenate	-	100 lb

**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
Sodium selenate	X	X	X	X	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**

Health, Safety and Environmental Department  
Email: tech@alfa.com  
www.alfa.com

**Creation Date**

26-Nov-2010

**Revision Date**

22-Mar-2018

**Print Date**

22-Mar-2018

**Revision Summary**

SDS authoring systems update, replaces ChemGes SDS No. 13410-01-0.

**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**

# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Sodium Selenite

### Other means of identification

**Product Code(s)** 0321

**UN/ID no.** 2630

**Synonyms** No information available

### Recommended use of the chemical and restrictions on use

**Recommended Use** For Further Manufacturing Use Only.

**Uses advised against** Not for Human or Animal Drug Use

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

#### **Company Address**

VWR International, LLC  
 Radnor Corporate Center  
 100 Matsonford Road  
 Radnor, PA 19087-8660

#### **Manufacturer Address**

VWR International, LLC  
 28600 Fountain Parkway  
 Solon, Ohio 44139

**Company Phone Number**

1-800-448-4442

**E-mail Address**

info@amresco-inc.com

### Emergency Telephone Number

**Emergency Telephone Number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

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

Acute Toxicity - Oral	Category 2
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin Sensitization	Category 1
Specific target organ toxicity (repeated exposure)	Category 2

### Label elements

#### **Emergency Overview**

**Danger**

#### **Hazard statements**

H300 - Fatal if swallowed

H317 - May cause an allergic skin reaction

H331 - Toxic if inhaled

H373 - May cause damage to organs through prolonged or repeated exposure



<b>Appearance</b> White to off-white	<b>Physical State</b> Powder	<b>Odor</b> No information available
--------------------------------------	------------------------------	--------------------------------------

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Contaminated work clothing must not be allowed out of the workplace  
Wear protective gloves  
Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

Specific treatment (see .? on this label)  
Specific treatment (see .? on this label)  
Get medical advice/attention if you feel unwell  
IF ON SKIN: Wash with plenty of water and soap  
If skin irritation or rash occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
Call a POISON CENTER or doctor  
IF SWALLOWED: Immediately call a POISON CENTER or doctor  
Rinse mouth

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not regulated

**Other Information**

- Toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Sodium selenite	10102-18-8	233-267-9	95-100	Not applicable

**4. FIRST AID MEASURES****First Aid Measures**

<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Rinse mouth.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms/Effects** No information available.



**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available.

**Specific Hazards Arising from the Chemical**

No information available.

**Hazardous Combustion Products** Selenium/Selenium Oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**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, protective equipment and emergency procedures**

**Personal protection** Ensure adequate ventilation, especially in confined areas.

**Environmental Precautions**

**Environmental Precautions** See Section 12 for additional Ecological information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

**7. HANDLING AND STORAGE****Precautions for Safe Handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Moisture sensitive.

**Conditions for safe storage, including any incompatibilities**

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

**Incompatible Products** Strong acids.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

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

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium selenite 10102-18-8	-	-	-

**Appropriate engineering controls**

**Engineering Measures**                      Showers  
    Eyewash stations  
    Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**                      Tightly fitting safety goggles.

**Skin and Body Protection**                      Wear protective gloves/clothing.

**Respiratory Protection**                      If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical State</b>	Powder	<b>Odor</b>	No information available
<b>Appearance</b>	White to off-white	<b>Odor Threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point		
Boiling Point/Range	No information available	
Flash Point (High in °C)	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

**Other Information**

Softening Point	No information available
Molecular Weight	No information available
VOC Content	No information available
Density	No information available
Bulk Density	No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to Avoid**

Protect from moisture.

**Incompatible Materials**

Strong acids.

**Hazardous Decomposition Products**

Selenium/Selenium oxides.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	Toxic by inhalation.
<b>Eye Contact</b>	There is no data available for this product.
<b>Skin Contact</b>	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
<b>Ingestion</b>	May be fatal if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium selenite 10102-18-8	= 7 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms** No information available.

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

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

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium selenite 10102-18-8	-	Group 3	-	-

**Reproductive Toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Target Organ Effects** Liver.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Sodium selenite	-	-	-

10102-18-8			
------------	--	--	--

**Persistence and Degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical Name	Partition coefficient
Sodium selenite 10102-18-8	-

**Other Adverse Effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Waste Disposal Method**

Dispose of material in accordance with all federal, state, and local regulations.

**Contaminated Packaging**

Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Sodium selenite 10102-18-8	(hazardous constituent - no waste number)	-	-	-

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium selenite 10102-18-8	-	-	-	-

Chemical Name	California Hazardous Waste Status
Sodium selenite 10102-18-8	Toxic

**14. TRANSPORT INFORMATION****DOT**

UN/ID no. 2630  
 Proper shipping name SELENITES (CONTAINS SODIUM SELENITE)  
 Hazard Class 6.1  
 Packing Group I

**IATA**

UN/ID no. 2630  
 Proper shipping name SELENITES (CONTAINS SODIUM SELENITE)  
 Hazard Class 6.1  
 Packing Group I

**15. REGULATORY INFORMATION****International Inventories**

TSCA Complies  
 DSL/NDL Complies  
 EINECS/ELINCS Complies  
 ENCS Complies  
 IECSC Complies  
 KECL Complies  
 PICCS Complies  
 AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values %
Sodium selenite 10102-18-8 ( 95-100 )	1.0

**SARA 311/312 Hazard Categories**

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

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium selenite 10102-18-8	100 lb	X	-	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium selenite 10102-18-8	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Sodium selenite - 10102-18-8	-

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium selenite 10102-18-8	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not regulated

**16. OTHER INFORMATION**

Issuing Date 30-Oct-2009  
Revision Date 08-Jan-2016

**Revision Note**

No information available

**Disclaimer**

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

**End of Safety Data Sheet**



**VWR ANALYTICAL**

# SAFETY DATA SHEET

**Issuing Date** 23-Jul-2012

**Revision Date** 12-Feb-2015

**Revision Number** 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Name** SODIUM SULFATE

**Other means of identification**

**Product Code(s)** BDH9302-2.5KG : BDH9302-500G

**Synonyms** No information available.

**Recommended use of the chemical and restrictions on use**

**Recommended Use** For Laboratory Use Only. Not for Drug, Food, or Household use.

**Uses advised against** Not for Human or Animal Drug Use

**Details of the supplier of the safety data sheet**

**Company Address**

VWR International, LLC  
Radnor Corporate Center  
100 Matsonford Road  
Radnor, PA 19087-8660

**Company Phone Number** 610-386-1700

**E-mail Address** www.vwr.com

**Emergency Telephone Number**

**Emergency Telephone Number** CHEMTREC 800.424.9300  
CANUTEC 613.996.6666

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

**Label elements**

**Emergency Overview**

**Appearance** White

**Physical State** Powder

**Odor** No information available

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Sodium Sulfate	7757-82-6	231-820-9	95-100	Not applicable

#### 4. FIRST AID MEASURES

##### First Aid Measures

<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Rinse mouth.

##### Most important symptoms and effects, both acute and delayed

**Most Important Symptoms/Effects** No information available.

##### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

Use extinguishing media appropriate to surrounding fire conditions.

**Unsuitable Extinguishing Media** No information available.

##### Specific Hazards Arising from the Chemical

No information available.

**Hazardous Combustion Products** Sulfur oxides.

##### Explosion Data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### 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, protective equipment and emergency procedures

**Personal Precautions** Ensure adequate ventilation, especially in confined areas.

##### Environmental Precautions

**Environmental Precautions** See Section 12 for additional Ecological information.

##### Methods and material for containment and cleaning up



**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

**Handling** Handle in accordance with good industrial hygiene and safety practice. Hygroscopic.

### Conditions for safe storage, including any incompatibilities

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

**Incompatible Products** Strong acids. Aluminium. Magnesium. moisture.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

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

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium Sulfate 7757-82-6	-	-	

### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Avoid contact with eyes. Safety glasses with side-shields.

**Skin and Body Protection** Wear protective gloves/clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Powder	<b>Odor</b>	No information available
<b>Appearance</b>	White	<b>Odor Threshold</b>	No information available
<b>Color</b>	No information available		

<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
<b>pH</b>	No information available.	
<b>Melting point/freezing point</b>	844 °C	
<b>Boiling Point/Range</b>	No information available.	
<b>Flash Point (High in °C)</b>	No information available.	
<b>Evaporation Rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	

<b>Flammability Limit in Air</b>	
Upper flammability limit:	No information available.
Lower flammability limit:	No information available.
Vapor pressure	No information available.
Vapor Density	No information available.
Specific Gravity	1.46
Water Solubility	Soluble in 1.5 parts of water @ 25C (77F)
Solubility in other solvents	No information available.
Partition coefficient	No information available
Autoignition Temperature	
Decomposition Temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available.
Explosive Properties	No information available
Oxidizing Properties	No information available

**Other Information**

Softening Point	No information available.
Molecular Weight	No information available
VOC Content	No information available.
Density	No information available
Bulk Density	No information available

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to Avoid**

Protect from moisture.

**Incompatible Materials**

Strong acids. Aluminium. Magnesium. moisture.

**Hazardous Decomposition Products**

Sulfur oxides.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

Inhalation	There is no data available for this product.
Eye Contact	There is no data available for this product.
Skin Contact	There is no data available for this product.
Ingestion	There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
---------------	-----------	-------------	-----------------

Sodium Sulfate 7757-82-6	> 10000 mg/kg ( Rat )	-	-
-----------------------------	-----------------------	---	---

**Information on toxicological effects**

**Symptoms** No information available.

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

**Sensitization** No information available.  
**Mutagenic Effects** No information available.  
**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium Sulfate 7757-82-6	-	-	-	-

**Reproductive Toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Sodium Sulfate 7757-82-6	-	13500 - 14500: 96 h Pimephales promelas mg/L LC50 6800: 96 h Pimephales promelas mg/L LC50 static 3040 - 4380: 96 h Lepomis macrochirus mg/L LC50 static 13500: 96 h Lepomis macrochirus mg/L LC50	2564: 48 h Daphnia magna mg/L EC50 630: 96 h Daphnia magna mg/L EC50

**Persistence and Degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical Name	Log Pow
Sodium Sulfate 7757-82-6	-

**Other Adverse Effects** No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste Disposal Method** Dispose of material in accordance with all federal, state, and local regulations.

**Contaminated Packaging** Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Sodium Sulfate 7757-82-6	-	-	-	-

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
---------------	--------------------------------------	------------------------	------------------------	------------------------

Sodium Sulfate 7757-82-6	-	-	-	-
-----------------------------	---	---	---	---

Chemical Name	California Hazardous Waste Status
Sodium Sulfate 7757-82-6	-

#### 14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

##### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

##### U.S. Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Sodium Sulfate 7757-82-6 ( 95-100 )	-

##### SARA 311/312 Hazard Categories

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

##### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Sulfate 7757-82-6	-	-	-	-

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium Sulfate 7757-82-6	-	-	-

#### **U.S. State Regulations**

##### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Sodium Sulfate - 7757-82-6	-

#### **U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium Sulfate 7757-82-6	-	-	X

##### **U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

Canada

##### **WHMIS Hazard Class**

Non-controlled

## **16. OTHER INFORMATION**

Issuing Date 23-Jul-2012

Revision Date 12-Feb-2015

Revision Note

No information available

##### **Disclaimer**

The information provided on this SDS 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 Safety Data Sheet**

Revision date: 04/13/2015

Version: 1.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Trade name/designation:	Sulfuric Acid
Product No.:	BDH3068-500MLP BDH3070-2.5LPC BDH3072-2.5LG BDH3074-3.8LP BDH3076-19L BDH3078-56L BDH3088-111L BDH3090-185L BDH3132-2.2LP TXBDH307438CPI
Other means of identification:	Oil of Vitriol, Battery Acid, Sulphuric Acid, Dihydrogen Sulfate

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Manufacturing and Laboratory use

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

Company VWR International, LLC  
Radnor Corporate Center  
100 Matsonford Road  
Radnor, PA 19087-8660  
Telephone 610.386.1700

### 1.4. Emergency Telephone number

CHEMTREC 800.424.9300  
CANUTEC 613.996.6666

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

For the full text of the H-Statement(s) and R-phrases(s) mentioned in this Section, see Section 16.

Hazard classes and hazard categories	Hazard statements
Skin corrosion; Category 1A	Causes severe skin burns and eye damage
Serious eye damage; Category 1	Causes serious eye damage
Acute aquatic toxicity; Category 3	Harmful to aquatic life

## 2.2. GHS Label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statements	
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.

Precautionary statements	
P260	Do not breathe mists.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/physician.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

## 2.3. WHIMS Classification

Class E: Corrosive material

## 2.4. Hazards not otherwise classified (HNOC) or not covered by GHS or WHIMS

Not Available

## SECTION 3: Composition / information on ingredients

### 3.1. Hazard components

Chemical name	Formula	Molecular weight	CAS#	Weight%
Sulfuric Acid	H <sub>2</sub> SO <sub>4</sub>	98.08 g/mol	7664-93-9	93-98

## SECTION 4: First aid measures

### 4.1. General information

#### In case of inhalation

Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respirations.

#### In case of skin contact

Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.

#### In case of eye contact

Immediately rinse with plenty of water for at least 15 minutes and seek medical attention.

#### In case of ingestion

**Do Not Induce Vomiting!** Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

May cause deep, penetrating ulcers of the skin. Contact with skin may cause inflammation and severe burns. Contact to eyes may cause severe burns and possible irreversible eye damage including corneal injury and cataracts. Inhalation may cause coughing burns and breathing difficulty. Ingestion may cause burns, swelling of the lips, mouth, and larynx, throat constriction, nausea, vomiting, convulsions, shock, and may cause severe and permanent damage to gastrointestinal tract.

### 4.3. Indication of any immediate medical attention and special treatment needed

Not Available



## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool unopened containers with water.

### 5.2. Special hazards arising from the substance or mixture

Hydrogen sulfide gas

### 5.3. Special protective equipment for firefighters

Not Available

### 5.4. Hazardous combustion products

Not Available

### 5.5. Advice for firefighters

Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

### 5.6. Additional information

Not Available

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

See section 8 for recommendations on the use of personal protective equipment.

### 6.2. Environmental precautions

Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

### 6.3. Methods and material for containment and cleaning up

Neutralize spill with sodium bicarbonate or soda lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

### 6.4. Additional information

Not Available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in cool, dry, well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

### 7.3. Specific end use(s)

Not Available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Chemical Name	Limit value type & Country of Origin	Exposure Limit value	Source
Sulfuric Acid	0.2 mg/m <sup>3</sup>	TLV	ACGIH
	1 mg/m <sup>3</sup>	PEL	OSHA
	1 mg/m <sup>3</sup>	REL	NIOSH
	15 mg/m <sup>3</sup>	IDLH	OSHA

### 8.2. Exposure controls

#### Appropriate engineering controls

Showers  
Eye wash stations  
Ventilation system

#### Personal protection equipment

##### Eye/face protection

Safety glasses or goggles with face shield

##### Skin protection

Nitrile or rubber gloves and full body protection

##### Respiratory protection

Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.

## Hygiene measures

Handle in accordance with good industrial hygiene and safety practices.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

a) Appearance:	
Physical state	Liquid
Color	Clear, colorless
b) Odor	Not Available
c) Odor Threshold	Not Available
d) pH	1
e) Melting point/ freezing point	3°C (37°F)
f) Initial boiling point and boiling range	290°C (554°F)
g) Flash point	Not Available
h) Evaporation rate	Not Available
i) Flammability (solid, gas)	Not Available
j) Upper/lower flammability or explosive limits	Not Available
k) Vapor pressure	Not Available
l) Vapor density	Not Available
m) Relative density	1.84
n) Solubilities	Soluble in water
o) Partition coefficient (n-Octanol/Water)	Not Available
p) Auto-ignition temperature	Not Available
q) Decomposition temperature	
r) Viscosity	Not Available
s) Explosive properties	Not Available
t) Oxidizing properties	Not Available

### 9.2. Other information

Not Available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Not Available

### 10.2. Chemical stability

Stable under normal storage conditions

### 10.3. Possibility of hazardous reactions

Not Available

### 10.4. Conditions to avoid

Uncontrolled additions of water

### 10.5. Incompatible materials

Bases, halides, organic material, carbides, chlorates, fulminates, nitrates, picrates, cyanides, cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorus (III) oxide, powdered metals

### 10.6. Hazardous decomposition products

Hydrogen chloride gas

## SECTION 11: Toxicology

### 11.1. Information on toxicological effects

#### Acute toxicity

Oral LD<sub>50</sub>

Inhalation LC<sub>50</sub>

Dermal LD<sub>50</sub>

Other information on acute toxicity

#### Skin corrosion/irritation

Skin – Rabbit – Result: Extremely corrosive and destructive to tissue

#### Serious eye damage/eye irritation

Eyes – Rabbit – Result: Corrosive to eyes

#### Respiratory or skin sensitization

Not Available

**Germ cell mutagenicity**

Not Available

**Carcinogenicity**

IARC – 1: Carcinogenic to humans (aerosol form)

ACGIH – A2: Suspected human carcinogen (aerosol form)

**Reproductive toxicity**

Not Available

**Specific target organ toxicity-single exposure**

Not Available

**Specific target organ toxicity-repeated exposure**

Not Available

**Aspiration hazard**

Not Available

**Additional information**

Not Available

## SECTION 12: Ecological information

**12.1. Ecotoxicity**

LC50 – Gambusia affinis – 42 mg/L – 96h

EC50 - Daphnia magna (Water flea) - 29 mg/l - 24 h

**12.2. Persistence and degradability**

Not Available

**12.3. Bioaccumulative potential**

Not Available

**12.4. Mobility in soil**

Not Available

**12.5. Results of PBT and vPvB assessment**

Not Available

**12.6. Other adverse effects**

Not Available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Contact a licensed professional waste disposal service to dispose of this material.

### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

### Land Transport DOT (U.S.)

UN Number 1830  
Proper Shipping name Sulfuric acid  
Transport Hazard Classes  
Class 8  
Hazard Label(s) 8  
Packing Group II  
Environmental hazard(s)  
Special precautions for user

### Sea Transport IMDG

UN Number 1830  
Proper Shipping name Sulfuric acid  
Transport Hazard Classes  
Class 8  
Hazard Label(s) 8  
EMS- No. F-A, S-B  
Packing Group II  
Environmental hazard(s)  
Segregation Group  
Special precautions for user

### Air Transport IATA

UN Number 1830

Proper Shipping name    Sulfuric acid  
Transport Hazard Classes  
    Class     8  
    Hazard Label(s) 8  
Packing Group    II  
Environmental hazard(s)  
Special precautions for user

## SECTION 15: Regulatory information

### OSHA Hazards

Corrosive

### SARA 302 Extremely Hazardous Substances

Sulfuric Acid

### SARA 313 (TRI reporting)

Sulfuric Acid

### SARA 311/312 Hazardous Chemicals

Acute Health Hazard, Chronic Health Hazard

### Massachusetts Right-To-Know Substance List

Sulfuric Acid

### Pennsylvania Right-To-Know Hazardous substances

Sulfuric Acid

### New Jersey Worker and Community Right-To-Know Components

Sulfuric Acid

### California Proposition 65

Sulfuric Acid

Inventory status:

Canada DSL Inventory List: Listed

US TSCA Inventory List: Listed

EINECS, ELINCS or NLP: 231-939-5

## SECTION 16: Other information

### Full text of H-Statement(s) and R-phrases

H314 Causes severe skin burns and eye damage.

H402 Harmful to aquatic life.

R34 Causes burns.

### Canadian Carcinogenicity hazard class

PHNOC hazard class

HHNOC hazard class

Biohazardous Infectious Materials hazard class

### NFPA Rating:

Health: 3

Flammability: 0

Reactivity: 2

Special Hazard: W



### DISCLAIMER

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.



# Safety Data Sheet

*acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)*

Printing date 03/05/2015

Reviewed on 12/01/2014

## 1 Identification

- **Product identifier**
- **Trade name:** Iron powder
- **Article number:** 125385
- **CAS Number:**  
7439-89-6
- **EC number:**  
231-096-4
- **Application of the substance / the mixture** Laboratory chemicals for research and development
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
BeanTown Chemical  
9 Sagamore Park Road  
Hudson, NH 03051  
USA
- 
- Phone: (603) 402-2234  
Fax: (603) 402-9713  
Email: [technical@beantownchem.com](mailto:technical@beantownchem.com)  
[www.beantownchem.com](http://www.beantownchem.com)
- **Information department:** Technical Support Department
- **Emergency telephone number:**  
During normal operating hours, please call (603) 402-2234  
After hours, please call Chemtrec at (800) 424-9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Sol. 1 H228 Flammable solid.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02



GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
iron

(Contd. on page 2)

USA

# Safety Data Sheet

## acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/05/2015

Reviewed on 12/01/2014

**Trade name: Iron powder**

(Contd. of page 1)

- **Hazard statements**

Flammable solid.  
Causes serious eye irritation.  
May cause respiratory irritation.

- **Precautionary statements**

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Avoid breathing dust/fume/gas/mist/vapors/spray  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**

- **CAS No. Description**

7439-89-6 iron

- **Identification number(s)**

- **EC number:** 231-096-4

### 4 First-aid measures

- **Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **For safety reasons unsuitable extinguishing agents:** Water with full jet

- **Special hazards arising from the substance or mixture** No further relevant information available.

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/05/2015

Reviewed on 12/01/2014

Trade name: Iron powder

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:**  
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.

(Contd. on page 4)

# Safety Data Sheet

## acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/05/2015

Reviewed on 12/01/2014

**Trade name:** Iron powder

(Contd. of page 3)

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Tightly sealed goggles

### 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Powder
Color:	Not determined.
Odor:	Characteristic
Odour threshold:	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range:	1535 °C (2795 °F)
Boiling point/Boiling range:	2750 °C (4982 °F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Highly flammable.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Auto igniting:** Not determined.

· **Danger of explosion:** Not determined.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapor pressure:** Not applicable.

· **Density at 20 °C (68 °F):** 7.86 g/cm<sup>3</sup> (65.592 lbs/gal)

· **Bulk density at 20 °C (68 °F):** 2900 kg/m<sup>3</sup>

· **Relative density** Not determined.

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

(Contd. on page 5)

# Safety Data Sheet

## acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/05/2015

Reviewed on 12/01/2014

**Trade name:** Iron powder

(Contd. of page 4)

- |   |  |
|---|--|
| <b>· Solubility in / Miscibility with Water:</b>  | Insoluble.                                 |
| <b>· Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| <b>· Viscosity:</b>                               |  |
| <b>Dynamic:</b>                                   | Not applicable.                            |
| <b>Kinematic:</b>                                 | Not applicable.                            |
| <b>Organic solvents:</b>                          | 0.0 %                                      |
| <b>· Solids content:</b>                          | 100.0 %                                    |
| <b>· Other information</b>                        | No further relevant information available. |

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- on the skin:** No irritant effect.
- on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**
- IARC (International Agency for Research on Cancer)**
- Substance is not listed.
- NTP (National Toxicology Program)**
- Substance is not listed.
- OSHA-Ca (Occupational Safety & Health Administration)**
- Substance is not listed.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

(Contd. on page 6)

USA

# Safety Data Sheet

## acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/05/2015

Reviewed on 12/01/2014

Trade name: Iron powder

(Contd. of page 5)

- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- |   |  |
|---|--|
| · <b>UN-Number</b>  | UN3089   |
| · <b>DOT, IMDG, IATA</b>  |  |
| · <b>UN proper shipping name</b>  |  |
| · <b>DOT</b>  | Metal powders, flammable, n.o.s.   |
| · <b>IMDG, IATA</b>   | METAL POWDER, FLAMMABLE, N.O.S.  |
| · <b>Transport hazard class(es)</b>   |  |
| · <b>DOT, IMDG, IATA</b>  |  |
| · <b>Class</b>  | 4.1 Flammable solids, self-reactive substances and solid desensitised explosives         |
| · <b>Label</b>  | 4.1  |
| · <b>Packing group</b>  |  |
| · <b>DOT, IMDG, IATA</b>  | II   |
| · <b>Environmental hazards:</b>   |  |
| · <b>Marine pollutant:</b>  | No   |
| · <b>Special precautions for user</b>   | Warning: Flammable solids, self-reactive substances and solid desensitised explosives    |
| · <b>EMS Number:</b>  | F-G,S-G  |
| · <b>Segregation groups</b>   | Heavy metals and their salts (including their organometallic compounds), powdered metals |
| · <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable.  |
| · <b>UN "Model Regulation":</b>   | UN3089, Metal powders, flammable, n.o.s., 4.1, II  |

USA

(Contd. on page 7)

# Safety Data Sheet

*acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)*

Printing date 03/05/2015

Reviewed on 12/01/2014

**Trade name:** Iron powder

(Contd. of page 6)

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (extremely hazardous substances):**

Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

· **TSCA (Toxic Substances Control Act):**

Substance is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

· **Chemicals known to cause developmental toxicity:**

Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

· **RTECS**

Substance is not listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **NFPA ratings (scale 0-4)**

Health = 1

Fire = 0

Reactivity = 0

· **HMIS ratings (scale 0-4)**

Health = 1

Fire = 0

Reactivity = 0

· **Department issuing SDS:** Technical Support Department

· **Contact:** Technical Support Department

· **Date of preparation / last revision** 03/05/2015 / -

(Contd. on page 8)

**Safety Data Sheet**  
**acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Printing date 03/05/2015

Reviewed on 12/01/2014

**Trade name: Iron powder**

(Contd. of page 7)

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Flam. Sol. 1: Flammable solids, Hazard Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

USA