



SAFETY DATA SHEET

Creation Date 02-Nov-2010

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Revision Number 2

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: **SODIUM BIASELENITE (L121)**
Cat No. : **LP0121**
Synonyms Sodium hydrogen selenite
Sodium selenite
CAS-No 7782-82-3
EC-No. 231-966-3
Molecular Formula HNaO3Se

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company	Oxoid Ltd Wade Road Basingstoke, Hants, UK RG24 8PW Tel: +44 (0) 1256 841144 mbd-sds@thermofisher.com	Supplier Oxoid Ltd. Wade Road Basingstoke, Hants, UK RG24 8PW Telephone: +44 (0) 1256 841144
E-mail address	mbd-sds@thermofisher.com	

1.4. Emergency telephone number

Carechem 24: +44 (0) 1865 407333

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Acute oral toxicity	Category 3
Acute Inhalation Toxicity - Gas	Not Classified
Acute Inhalation Toxicity - Vapors	Category 3
Acute Inhalation Toxicity - Dusts and Mists	Category 3
Specific target organ toxicity - (repeated exposure)	Category 2

Environmental hazards

Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Classification according to EU Directives 67/548/EEC or 1999/45/EC

SECTION 2: HAZARDS IDENTIFICATION

Symbol(s)	T - Toxic N - Dangerous for the environment
R-phrases(s)	R33 - Danger of cumulative effects R23/25 - Toxic by inhalation and if swallowed R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

2.2. Label elements

Signal Word

Danger

Hazard Statements

- H301 - Toxic if swallowed
- H331 - Toxic if inhaled
- H410 - Very toxic to aquatic life with long lasting effects
- H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements

- P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician
- P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
- P304 + P312 - IF INHALED: Call a POISON CENTER or doctor/ physician if you feel unwell
- P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray
- P314 - Get medical advice/ attention if you feel unwell
- P273 - Avoid release to the environment

2.3. Other hazards

No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances**

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008	DSD Classification - 67/548/EEC
Sodium selenite	7782-82-3	EEC No. 231-966-3	100	Acute Tox. 3 (H301) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	T; R23/25 R33 N; R50-53

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4: FIRST AID MEASURES

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention immediately if symptoms occur..
Ingestion	Do not induce vomiting without medical advice. Clean mouth with water. If accidentally swallowed obtain immediate medical attention..
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.
Protection of First-aiders	Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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

No information available

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

Notes to Physician Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Suitable Extinguishing Media**

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

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Burning produces obnoxious and toxic fumes. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Burning produces obnoxious and toxic fumes.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate personnel to safe areas. Use personal protective equipment. Avoid dust formation.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated surface thoroughly.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Ensure adequate ventilation. Do not breathe dust. Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight.

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Exposure limits**

Component	European Union	The United Kingdom	France	Belgium	Spain
Sodium selenite		STEL: 0.3 mg/m ³ 15 min TWA: 0.1 mg/m ³ 8 hr		TWA 0.2 mg(Se)/m ³	TWA / VLA-ED: 0.1 mg/m ³ (8 horas)

Component	Italy	Germany	Portugal	The Netherlands	Finland
Sodium selenite		TWA: 0.05 mg/m ³ (8 Stunden). AGW - exposure factor 1 TWA: 0.02 mg/m ³ (8 Stunden). MAK Höhepunkt: 0.16 mg/m ³ Haut	TWA: 0.2 mg/m ³ 8 horas		

Component	Austria	Denmark	Switzerland	Poland	Norway
Sodium selenite	STEL: 0.3 mg/m ³ 15 Minuten TWA: 0.1 mg/m ³ 8 Stunden		STEL: 0.2 mg/m ³ 15 Minuten MAK: 0.05 mg/m ³ 8 Stunden		TWA: 0.05 mg/m ³ 8 timer

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

Derived No Effect Level (DNEL) No information available.

<u>Route of exposure</u>	<u>Acute effects (local)</u>	<u>Acute effects (systemic)</u>	<u>Chronic effects (local)</u>	<u>Chronic effects (systemic)</u>
Oral Dermal Inhalation				

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Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls**Engineering Measures**

Use only under a chemical fume hood.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal protective equipment**Eye Protection**

Safety glasses with side-shields (European standard - EN 166)

Hand Protection

Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Disposable gloves	See manufacturers recommendations	-	EN 374	(minimum requirement)

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Remove gloves with care avoiding skin contamination.

Skin and body protection

Long sleeved clothing

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly.

Large scale/emergency use

In case of insufficient ventilation wear suitable respiratory equipment

Small scale/Laboratory use

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

When RPE is used a face piece Fit Test should be conducted.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

Prevent product from entering drains. Avoid dust formation

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties**Appearance**

Colorless - White

Physical State

Crystalline, Powder.

Odor

No information available

Odor Threshold

No data available

pH

Not applicable

Melting Point/Range

No data available

Softening Point

No data available

Boiling Point/Range

Not applicable

Flash Point

Not applicable

Method - No information available.

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Evaporation Rate	No data available	
Flammability (solid,gas)	No information available.	
Explosion Limits	No data available.	
Vapor Pressure	No data available	
Vapor Density	No data available	(Air = 1.0)
Specific Gravity / Density	No data available	
Bulk Density	No data available	
Water Solubility	No information available.	
Solubility in other solvents	No information available.	
Partition Coefficient (n-octanol/water)		
Autoignition Temperature	No data available	
Decomposition temperature	No data available	
Viscosity	No data available	
Explosive Properties	No information available.	
Oxidizing Properties	No information available.	

9.2. Other information

Molecular Formula HNaO3Se

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity	None known, based on information available.
10.2. Chemical stability	Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	
Hazardous Polymerization	No information available
Hazardous Reactions	No information available.
10.4. Conditions to avoid	Exposure to moisture, Keep away from direct sunlight.
10.5. Incompatible materials	Strong oxidizing agents. Strong acids.
10.6. Hazardous decomposition products	Burning produces obnoxious and toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Product Information**

(a) acute toxicity;	
Oral	Category 3
Dermal	No data available
Inhalation	No data available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium selenite	2.5mg/kg (Rat) 8.6mg/kg (Rabbit)		

(b) skin corrosion/irritation;	No data available
(c) serious eye damage/irritation;	No data available
(d) respiratory or skin sensitization;	
Respiratory	No data available
Skin	No data available
(e) germ cell mutagenicity;	No data available
(f) carcinogenicity;	No data available
	There are no known carcinogenic chemicals in this product
(g) reproductive toxicity;	No data available
Reproductive Effects	Experiments have shown reproductive toxicity effects on laboratory animals.
(h) STOT-single exposure;	No data available
(i) STOT-repeated exposure;	Category 2
Target Organs	Respiratory system, Lungs, Skin, Central nervous system (CNS), Cardiovascular system, Gastrointestinal tract (GI).
(j) aspiration hazard;	No data available
Symptoms / effects, both acute and delayed	No information available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity	
Ecotoxicity effects	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
12.2. Persistence and degradability	No information available
12.3. Bioaccumulative potential	No information available.
12.4. Mobility in soil	The product is water soluble, and may spread in water systems.
12.5. Results of PBT and vPvB assessment	No data available for assessment
12.6. Other adverse effects	
Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors
Persistent Organic Pollutant	This product does not contain any known or suspected substance
Ozone Depletion Potential	This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods	
Waste from Residues / Unused Products	Dispose of as hazardous waste in compliance with local and national regulations.

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Contaminated Packaging	Dispose of in accordance with local regulations.
European Waste Catalogue (EWC)	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific
Other Information	Waste codes should be assigned by the user based on the application for which the product was used

SECTION 14: TRANSPORT INFORMATION**IMDG/IMO**

14.1. UN number	UN2630
14.2. UN proper shipping name	SELENITES
14.3. Transport hazard class(es)	6.1
14.4. Packing group	I

ADR

14.1. UN number	UN2630
14.2. UN proper shipping name	SELENITES
14.3. Transport hazard class(es)	6.1
14.4. Packing group	I

IATA

14.1. UN number	UN2630
14.2. UN proper shipping name	SELENITES
14.3. Transport hazard class(es)	6.1
14.4. Packing group	I
14.5. Environmental hazards	No hazards identified
14.6. Special precautions for user	No special precautions required
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Sodium selenite	231-966-3	-		-	-	-	-	X	X	X	X

National Regulations

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

SECTION 16: OTHER INFORMATION**Full text of R-phrases referred to under sections 2 and 3**

R33 - Danger of cumulative effects

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R23/25 - Toxic by inhalation and if swallowed

Full text of H-Statements referred to under sections 2 and 3

H301 - Toxic if swallowed

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

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Legend**CAS** - Chemical Abstracts Service**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Existing and Evaluated Chemical Substances**WEL** - Workplace Exposure Limit**ACGIH** - American Conference of Industrial Hygiene**DNEL** - Derived No Effect Level**RPE** - Respiratory Protective Equipment**LC50** - Lethal Concentration 50%**NOEC** - No Observed Effect Concentration**PBT** - Persistent, Bioaccumulative, Toxic**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code**OECD** - Organisation for Economic Co-operation and Development**BCF** - Bioconcentration factor**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**ENCS** - Japan Existing and New Chemical Substances**AICS** - Australian Inventory of Chemical Substances**NZIoC** - New Zealand Inventory of Chemicals**TWA** - Time Weighted Average**IARC** - International Agency for Research on Cancer**PNEC** - Predicted No Effect Concentration**LD50** - Lethal Dose 50%**EC50** - Effective Concentration 50%**POW** - Partition coefficient Octanol:Water**vPvB** - very Persistent, very Bioaccumulative**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association**MARPOL** - International Convention for the Prevention of Pollution from Ships**ATE** - Acute Toxicity Estimate**VOC** - Volatile Organic Compounds**Key literature references and sources for data**

Suppliers safety data sheet,

Chemadvisor - LOLI,

Merck index,

RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Creation Date 02-Nov-2010**Revision Date** 17-Oct-2013**Revision Summary****Reason for revision** Update to Format.**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****Disclaimer**

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

End of Safety Data Sheet

