

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifiers

Product name : Sodium selenite pentahydrate

CAS-No. : 26970-82-1

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

Identified uses : Laboratory chemicals, Manufacture of substances

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 2)

Acute toxicity, Inhalation (Category 3)

Skin sensitization (Category 1)

Chronic aquatic toxicity (Category 2)

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

Very toxic if swallowed. Toxic by inhalation. Contact with acids liberates toxic gas. May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word : Danger

Hazard statement(s)

H300 : Fatal if swallowed.

H317 : May cause an allergic skin reaction.

H331 : Toxic if inhaled.

H411 : Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 : Wash hands thoroughly after handling.

P273 : Avoid release to the environment.

P280 : Wear protective gloves.

P301 + P310 : IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P311 : Call a POISON CENTER or doctor/ physician.

Supplemental Hazard information (EU)

EUH031 : Contact with acids liberates toxic gas.

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



R-phrase(s)

R23 : Toxic by inhalation.

R28 : Very toxic if swallowed.

R31 : Contact with acids liberates toxic gas.

R43 : May cause sensitization by skin contact.

R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S28 : After contact with skin, wash immediately with plenty of soap and water.

S36/37 : Wear suitable protective clothing and gloves.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S61 : Avoid release to the environment. Refer to special instructions/ Safety data sheets.

### 2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Formula : Na<sub>2</sub>O<sub>3</sub>Se · 5H<sub>2</sub>O

Molecular Weight : 263.01 g/mol

Concentration

Sodium selenite pentahydrate

CAS-No. : 26970-82-1

EC-No. : 233-267-9

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Nausea, Dizziness, Headache, anemia, Salivation, Tremors, Alopecia, Vomiting, Dermatitis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

no data available

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media

Dry powder Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media

Water

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

Sodium oxides, Selenium/selenium oxides

### 5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

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

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

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

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

Never allow product to get in contact with water during storage. Do not store near acids.

hygroscopic

### 7.3 Specific end uses

no data available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance : Form: crystalline

Colour: white

b) Odour : no data available

c) Odour Threshold : no data available

d) pH : 9 at 50 g/l at 20 °C

e) Melting/freezing point : no data available

f) Initial boiling point and boiling range : no data available

g) Flash point : not applicable

h) Evaporation rate : no data available

i) Flammability (solid, gas) : no data available

j) Upper/lower flammability or explosive limits : no data available

k) Vapour pressure : no data available

l) Vapour density : no data available

m) Water solubility : soluble

n) Partition coefficient: n-octanol/water : no data available

o) Autoignition : no data available

q) Decomposition : no data available

r) Viscosity : no data available

s) Explosive properties : no data available

t) Oxidizing properties : no data available

9.2 Other safety information : no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity

no data available

Respiratory or skin sensitization

May cause allergic skin sensitization

no data available

Genotoxicity

no data available

DNA damage

no data available

Genotoxicity in vitro - mouse - mammary gland

no data available

Genotoxicity in vitro - mouse - mammary gland

no data available

Genotoxicity in vitro - mouse - mammary gland

no data available

Carcinogenicity

no data available