# Sodium Sulfide 60% Flake

## SECTION 1. IDENTIFICATION

| | |
|---|---|
| **Product Identifier** | Sodium Sulfide 60% Flake |
| **Other Means of Identification** | Sodium Sulfide Hydrate |
| **Product Code(s)** | SO7510 |
| **Product Family** | Inorganic Solid |
| **Recommended Use** | Industrial. |
| **Restrictions on Use** | None known. |
| **Supplier Identifier** | Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995 |
| **Emergency Phone No.** | CANUTEC CANADA, 613-996-6666, 24 Hours |
| **SDS No.** | 0459 |

## SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

**Classification**

Acute toxicity (Oral) - Category 3; Skin corrosion - Category 1; Serious eye damage - Category 1

**Label Elements**

Signal Word:
Danger

Hazard Statement(s):
Toxic if inhaled.
Causes severe skin burns and eye damage.
May form combustible dust concentrations in air.
Toxic if swallowed.

Precautionary Statement(s):
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands and skin thoroughly after handling.
Keep only in original container.
Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.
Immediately call a POISON CENTRE or doctor.
Store locked up.

**Other Hazards**

May be a health and fire hazard in a confined space.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

| Chemical Name | CAS No. | % | Other Identifiers |
|---|---|---|---|
| Sodium sulfide, anhydrous | 1313-82-2 | 60 - 63 | Sodium monosulfide |
| Water | 7732-18-5 | 37 - 40 | Dihydrogen Oxide |

## SECTION 4. FIRST-AID MEASURES

**First-aid Measures**

**Inhalation**

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor.

**Skin Contact**

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Immediately call a Poison Centre or doctor.

**Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

**Ingestion**

Do not induce vomiting. Rinse mouth with water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.

**First-aid Comments**

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

**Most Important Symptoms and Effects, Acute and Delayed**

If in eyes: contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result. If on skin: contact can cause pain, redness, burns, and blistering. Permanent scarring can result.

**Immediate Medical Attention and Special Treatment**

**Special Instructions**

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media**

Use flooding quantities of water or other suitable extinguishing agent.

**Unsuitable Extinguishing Media**

DO NOT use carbon dioxide, or other agents that smother the flames.

**Specific Hazards Arising from the Product**

Combustible dust. May form combustible dust concentration in air. Reactive flammable. Heating increases the release of toxic vapour.
In a fire, the following hazardous materials may be generated: very toxic, flammable hydrogen sulfide; corrosive sulfur oxides.

**Special Protective Equipment and Precautions for Fire-fighters**

Evacuate area. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. Dust explosion hazard. Use water spray or fog to prevent dust formation and minimize risk of explosion. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Dike and recover contaminated water for appropriate disposal. Before entry, especially into confined areas, use an appropriate monitor to check for: toxic gases or vapours, flammable or explosive atmosphere, sufficient oxygen.
Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures**

Emergency responders: evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

**Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

**Methods and Materials for Containment and Cleaning Up**

Small spills or leaks: contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. For small dry spills: collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Avoid generating dust. Flush spill area. Large spills or leaks: contact emergency services and manufacturer/supplier for advice.

## SECTION 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

Obtain special instructions before use. Wear personal protective equipment to avoid direct contact with this chemical. Avoid breathing in this product. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty.

**Conditions for Safe Storage**

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in a closed container. Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet. Comply with all applicable health and safety regulations, fire and building codes.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters**

| | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|---|---|---|---|---|---|---|
| **Chemical Name** | **TWA** | **STEL** | **TWA** | **Ceiling** | **8-hr TWA** | **TWA** |
| Water | Not established | | Not established | | | |
| Sodium sulfide, anhydrous | Not established | | Not established | | | |

**Appropriate Engineering Controls**

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Use a corrosion-resistant exhaust ventilation system separate from other ventilation systems. Exhaust directly to the outside, taking any necessary precautions for environmental protection.

**Individual Protection Measures**

**Eye/Face Protection**

Wear chemical safety goggles and face shield when contact is possible.

**Skin Protection**

Wear chemical protective clothing e.g. gloves, aprons, boots.
No specific guidelines are available. Contact chemical manufacturer/supplier for advice.

**Respiratory Protection**

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

| | |
|---|---|
| **Appearance** | Yellow flakes. |
| **Odour** | Rotten eggs |
| **Odour Threshold** | Not available |
| **pH** | Not available |
| **Melting Point/Freezing Point** | 92 °C (198 °F) (melting); 92 °C (198 °F) (freezing) |
| **Initial Boiling Point/Range** | 174 °C (345 °F) |
| **Flash Point** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Flammability (solid, gas)** | Not available |
| **Upper/Lower Flammability or Explosive Limit** | Not available (upper); Not available (lower) |
| **Vapour Pressure** | Not available |
| **Vapour Density (air = 1)** | Not applicable |
| **Relative Density (water = 1)** | 1.858 |
| **Solubility** | Soluble in water; Not available (in other liquids) |
| **Partition Coefficient, n-Octanol/Water (Log Kow)** | Not available |
| **Auto-ignition Temperature** | Not available |
| **Decomposition Temperature** | Not available |
| **Viscosity** | Not available (kinematic); Not available (dynamic) |

### Other Information

| | |
|---|---|
| **Physical State** | Solid |

## SECTION 10. STABILITY AND REACTIVITY

**Reactivity**

In contact with water, releases a gas that presents a health hazard. Releases a flammable gas on contact with water or water vapour.

**Chemical Stability**

A change in appearance may indicate reduced stability.

**Possibility of Hazardous Reactions**

Reacts in the presence of air, water or humidity.

**Conditions to Avoid**

Water, moisture or humidity. Open flames, sparks, static discharge, heat and other ignition sources.

**Incompatible Materials**

Strong acids (e.g. hydrochloric acid), oxidizing agents (e.g. peroxides), water.

**Hazardous Decomposition Products**

Very toxic, flammable hydrogen sulfide; corrosive sulfur oxides.

## SECTION 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure**

Inhalation; skin contact; eye contact; ingestion.

**Acute Toxicity**

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|---|---|---|---|
| Water | Not available | > 89840 mg/kg (rat) | Not available |
| Sodium sulfide, anhydrous | Not available | 208 mg/kg (rat) | < 340 mg/kg (rabbit) |

**Skin Corrosion/Irritation**

Animal tests show skin corrosion.

**Serious Eye Damage/Irritation**

Causes serious eye damage based on skin corrosion information.

**STOT (Specific Target Organ Toxicity) - Single Exposure**

**Inhalation**

Toxic, can cause death Causes severe nose and throat irritation.

**Ingestion**

Causes severe irritation or burns to the mouth, throat and stomach.

**Aspiration Hazard**

No information was located.

**STOT (Specific Target Organ Toxicity) - Repeated Exposure**

Contact with acid may cause liberation of hydrogen sulfide. Overexposure to hydrogen sulfide gas may cause severe eye or respiratory tract irritation, rapid development of coma and respiratory failure. Low levels of hydrogen sulfide may cause headache, dizziness, neurological damage and gastritis.

**Respiratory and/or Skin Sensitization**

No information was located.

**Carcinogenicity**

| Chemical Name | IARC | ACGIH® | NTP | OSHA |
|---|---|---|---|---|
| Water | Not Listed | Not Listed | Not Listed | Not Listed |
| Sodium sulfide, anhydrous | Not evaluated | Not Listed | Not Listed | |

**Reproductive Toxicity**

**Development of Offspring**

No information was located.

**Sexual Function and Fertility**

No information was located.

**Effects on or via Lactation**

No information was located.

**Germ Cell Mutagenicity**

No information was located.

**Interactive Effects**

No information was located.

## SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

## SECTION 14. TRANSPORT INFORMATION

| Regulation | UN No. | Proper Shipping Name | Transport Hazard Class(es) | Packing Group |
|---|---|---|---|---|
| US DOT | UN1849 | SODIUM SULFIDE, HYDRATED | 8 | II |
| Canadian TDG | UN1849 | SODIUM SULFIDE, HYDRATED | 8 | II |

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## SECTION 15. REGULATORY INFORMATION

**Safety, Health and Environmental Regulations**

**Canada**

**Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

All ingredients are listed on the DSL or are not required to be listed.

**USA**

**Toxic Substances Control Act (TSCA) Section 8(b)**

All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.

## SECTION 16. OTHER INFORMATION

| | |
|---|---|
| **NFPA Rating** | **Health - 3 Flammability - 1 Instability - 0** |
| **SDS Prepared By** | Alphachem Limited |
| **Phone No.** | (905)-821-2995 |
| **Date of Preparation** | April 13, 2016 |
| **Date of Last Revision** | May 20, 2016 |
| **References** | CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). |
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