

Safety Data Sheet

Sodium Sulfide Flake Technical

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sodium Sulfide Flake Technical

Synonyms/Generic Names: Disodium sulfide

Product Number: 5440

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI. 53925

For More Information Call: 920-623-2140 (Monday-Friday 8:00-4:30)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Target Organ Effect, Harmful by ingestion, Toxic by skin absorption, Corrosive

Target Organs: Nerves, Cardiovascular system

Signal Word: Danger

Pictograms:







GHS Classification:

| Acute toxicity, Oral | Category 4 |
|--------------------------|-------------|
| Acute toxicity, Dermal | Category 3 |
| Skin corrosion | Category 1B |
| Serious eye damage | Category 1 |
| Acute aquatic toxicity | Category 1 |
| Chronic aquatic toxicity | Category 1 |

GHS Label Elements, including precautionary statements:

Hazard Statements:

| H302 | Harmful if swallowed. |
|---|-----------------------------|
| H311 | Toxic in contact with skin. |
| H314 Causes severe skin burns and eye damage. | |
| H400 | Very toxic to aquatic life. |

Revised on 02/02/2015 Page 1 of 6

Precautionary Statements:

| recadionary otatements. | | |
|-------------------------|---|--|
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray. | |
| P264 | Wash hands thoroughly after handling. | |
| P264 | Wash hands thoroughly after handling. | |
| P270 | Do not eat, drink or smoke when using this product. | |
| 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. | |
| | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse | |
| P303+P361+P353 | skin with water/shower. | |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. | |
| | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact | |
| P305+P351+P338 | lenses, if present and easy to do. Continue rinsing. | |
| P312 | Call a POISON CENTER/doctor/physician if you feel unwell. | |
| P330 | Rinse mouth. | |
| P362+P364 | Take off contaminated clothing and wash it before reuse. | |
| P363 | Wash contaminated clothing before reuse. | |
| P391 | Collect spillage. | |
| P405 | Store locked up. | |
| P501 | Dispose of contents/container in accordance with local regulations. | |
| | | |

Potential Health Effects

| Eyes | Causes eye burns. |
|------------|---|
| Inhalation | May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. |
| Skin | Toxic if absorbed through skin. Causes skin burns. |
| Ingestion | Toxic if swallowed. |

NFPA Ratings

| Health | 3 |
|-----------------|---------------|
| Flammability | 1 |
| Reactivity | 1 |
| Specific hazard | Not Available |

HMIS Ratings

| Health | 3 |
|------------|---|
| Fire | 1 |
| Reactivity | 1 |
| Personal | J |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | Weight % | CAS# | EINECS# / ELINCS# | Formula | Molecular Weight |
|----------------|----------|-----------|----------------------|-------------|---------------------|
| Sodium Sulfide | >98 | 1313-83-3 | N/A | Na₂S ⋅ 5H₂O | 168.13 g/mol |

4. FIRST-AID MEASURES

| Eyes | Rinse with plenty of water for at least 15 minutes and seek medical attention immediately. |
|------------|---|
| Inhalation | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not |
| | breathing, give artificial respiration. Get medical attention immediately. |
| Skin | Immediately flush with plenty of water for at least 15 minutes while removing contaminated |
| | clothing and wash using soap. Get medical attention immediately. |
| 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. |

Revised on 02/02/2015 Page 2 of 6

5. FIRE-FIGHTING MEASURES

| Suitable (and unsuitable) | Product is flammable. Use water spray, alcohol-resistant foam, dry |
|----------------------------------|---|
| extinguishing media | chemical or carbon dioxide. Use appropriate media for adjacent fire. |
| | Cool unopened containers with water. |
| Special protective equipment | Wear self-contained, approved breathing apparatus and full protective |
| and precautions for firefighters | clothing, including eye protection and boots. |
| Specific hazards arising from | Emits toxic fumes (sulfur oxides, sodium oxides) under fire conditions. |
| the chemical | (See also Stability and Reactivity section). |

6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and | See section 8 for recommendations on the use of personal protective equipment. |
|--|--|
| emergency procedures | |
| Environmental precautions | Prevent spillage from entering drains. Any release to the environment |
| | may be subject to federal/national or local reporting requirements. |
| Methods and materials for | Pick up and arrange disposal without creating dust. Sweep up and place |
| containment and cleaning up | in suitable, closed containers for disposal. Clean surfaces thoroughly with |
| | water to remove residual contamination. Dispose of all waste and cleanup |
| | materials in accordance with regulations. |

7. HANDLING AND STORAGE

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 dusts.

Conditions for safe storage, including any incompatibilities

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

Personal Protection

| | •····· | |
|------------|---|--|
| Eyes | Wear chemical safety glasses or goggles and face shield. | |
| Inhalation | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator. | |
| Skin | Wear nitrile or rubber gloves, apron or lab coat. | |
| Other | Not Available | |

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

Revised on 02/02/2015 Page 3 of 6

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance (physical state, color, etc.) | Yellow, deliquescent, crystalline solid. |
|---|---|
| Odor | Not Available |
| Odor threshold | Not Available |
| рН | Not Available |
| Melting point/freezing point | 50°C (122°F) |
| Initial boiling point and boiling range | Not Available |
| Flash point | Not Flammable |
| Evaporation rate | Not Available |
| Flammability (solid, gas) | Not Flammable |
| Upper/lower flammability or explosive limit | Not Explosive |
| Vapor pressure | Not Available |
| Vapor density | Not Available |
| Density | 1.427 g/cm ³ |
| Solubility (ies) | Easily soluble in water. Very slightly soluble in methanol. |
| Partition coefficient: n-octanol/water | Not Available |
| Auto-ignition temperature | Not Available |
| Decomposition temperature | Not Available |

10. STABILITY AND REACTIVITY

| Chemical Stability | Stable | |
|------------------------------------|--|--|
| Possibility of Hazardous Reactions | Will not occur. | |
| Conditions to Avoid | Exposure to light may affect product quality. Exposure to moisture may affect product quality. | |
| Incompatible Materials | Acids, oxidizing agents, aluminum, copper, zinc, and its alloys. | |
| Hazardous Decomposition Products | Sulfur oxides, sodium oxides. | |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Sodium Sulfide

| Skin | Not Available |
|-------------|---------------|
| Eyes | Not Available |
| Respiratory | Not Available |
| Ingestion | Not Available |

Carcinogenicity

| - | •··· <i>y</i> |
|----------|---|
| IARC | No components of this product present at levels greater than or equal to 0.1% is identified |
| | as probable, possible or confirmed human carcinogen by IARC. |
| ACGIH | No components of this product present at levels greater than or equal to 0.1% is identified |
| | as a carcinogen or potential carcinogen by ACGIH. |
| NTP | No components of this product present at levels greater than or equal to 0.1% is identified |
| | as a known or anticipated carcinogen by NTP. |
| OSHA | No components of this product present at levels greater than or equal to 0.1% is identified |
| | as a carcinogen or potential carcinogen by OSHA. |

Signs & Symptoms of Exposure

| Skin | Irritation, redness, itchiness. |
|-------------|--|
| Eyes | Irritation, redness, watering eyes, itchiness. |
| Respiratory | Irritation, coughing, wheezing. |
| Ingestion | Irritation, nausea, vomiting, diarrhea. |

Revised on 02/02/2015 Page 4 of 6

| Chronic Toxicity | Not Available |
|--------------------------------|---------------|
| Teratogenicity | Not Available |
| Mutagenicity | Not Available |
| Embryotoxicity | Not Available |
| Specific Target Organ Toxicity | Not Available |
| Reproductive Toxicity | Not Available |
| Respiratory/Skin Sensitization | Not Available |

12. ECOLOGICAL INFORMATION

EcotoxicitySodium Sulfide

| Aquatic Vertebrate | Not Available |
|----------------------|---------------|
| Aquatic Invertebrate | Not Available |
| Terrestrial | Not Available |

| Persistence and Degradability | Not Available |
|-------------------------------|-----------------------------|
| Bioaccumulative Potential | Not Available |
| Mobility in Soil | Not Available |
| PBT and vPvB Assessment | Not Available |
| Other Adverse Effects | Very toxic to aquatic life. |

13. DISPOSAL CONSIDERATIONS

| Waste Residues | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container or residue. |
|----------------|---|
| Product | Users should review their operations in terms of the applicable federal/national or |
| Containers | local regulations and consult with appropriate regulatory agencies if necessary |
| | before disposing of waste product container. |

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

| US DOT | UN1849, Sodium sulfide, hydrated, 8, pg II | |
|------------------|--|--|
| TDG | UN1849, SODIUM SULFIDE, HYDRATED, 8, pg II | |
| IMDG | UN1849, SODIUM SULFIDE, HYDRATED, 8, pg II | |
| Marine Pollutant | No | |
| IATA/ICAO | UN1849, Sodium sulfide, hydrated, 8, pg II | |

15. REGULATORY INFORMATION

| TSCA Inventory Status | All ingredients are listed on the TSCA inventory. | |
|---------------------------|---|--|
| DSCL (EEC) | All ingredients are listed on the DSCL inventory. | |
| California Proposition 65 | Not Listed | |
| SARA 302 | Not Listed | |
| SARA 304 | Not Listed | |

Page 5 of 6 Revised on 02/02/2015

| SARA 311 | Sodium sulfide |
|--------------|---|
| SARA 312 | Sodium sulfide |
| SARA 313 | Not Listed |
| WHMIS Canada | Class D-1B: Poisonous and infectious material- Immediate and serious effects- Toxic |
| | Class E: Corrosive material |

16. OTHER INFORMATION

| Revision | Date |
|------------|------------|
| Revision 1 | 03/13/2013 |
| Revision 2 | 01/16/2015 |
| Revision 3 | 02/02/2015 |

Disclaimer: Columbus Chemical Industries, Inc. ("Columbus") believes that the information herein is factual but is not intended to be all inclusive. The information relates only to the specific material designated and does not relate to its use in combination with other materials or its use as to any particular process. Because safety standards and regulations are subject to change and because Columbus has no continuing control over the material, those handling, storing or using the material should satisfy themselves that they have current information regarding the particular way the material is handled, stored or used and that the same is done in accordance with federal, state and local law. COLUMBUS MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE.

Revised on 02/02/2015 Page 6 of 6