

Safety Data Sheet

Stannous Chloride, Dihydrate, Crystal, ACS

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Stannous Chloride, Dihydrate, Crystal, ACS

Synonyms/Generic Names: Tin (II) chloride dihydrate; Stannous dichloride dihydrate

Product Number: 5515

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: Harmful by ingestion, Skin sensitizer, Corrosive

Target Organs: Blood, Bone

Signal Word: Danger

Pictograms:



GHS Classification:

| | |
|----------------------|-------------|
| Acute toxicity, Oral | Category 4 |
| Skin corrosion | Category 1B |
| Serious eye damage | Category 1 |

GHS Label Elements, including precautionary statements:

Hazard Statements:

| | |
|------|------------------------------------------|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |

Precautionary Statements:

| | |
|----------------|----------------------------------------------------------------------------|
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray. |
| P264 | Wash hands thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| 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. |

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 | Harmful if absorbed through skin. Causes skin burns. |
| Ingestion | Harmful if swallowed. |

NFPA Ratings

| | |
|------------------------|---------------|
| Health | 3 |
| Flammability | 0 |
| Reactivity | 0 |
| Specific hazard | Not Available |

HMIS Ratings

| | |
|-------------------|---|
| Health | 3 |
| Fire | 0 |
| Reactivity | 0 |
| Personal | J |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | Weight % | CAS # | EINECS# / ELINCS# | Formula | Molecular Weight |
|------------------------------|----------|------------|-------------------|---------------------------------------|------------------|
| Stannous Chloride, Dihydrate | >98 | 10025-69-1 | 231-868-0 | SnCl ₂ · 2H ₂ O | 225.65 g/mol |

4. FIRST-AID MEASURES

| | |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eyes | Immediately 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. |

5. FIRE-FIGHTING MEASURES

| | |
|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Suitable (and unsuitable) extinguishing media | Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water. |
| Special protective equipment and precautions for firefighters | Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. |
| Specific hazards arising from the chemical | Emits toxic fumes (tin oxides, hydrogen chloride gas) under fire conditions. (See also Stability and Reactivity section). |

6. ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures | See section 8 for recommendations on the use of personal protective equipment. |
| 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 containment and cleaning up | Pick up and arrange disposal without creating dust. Sweep up and place 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. Air and moisture sensitive. Store under inert gas. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Ventilation and appropriate grounding of containers.

| Component | Exposure Limits | Basis | Entity |
|------------------------------|---------------------|-------|--------|
| Stannous Chloride, Dihydrate | 2 mg/m ³ | TLV | ACGIH |
| | 2 mg/m ³ | PEL | OSHA |
| | 2 mg/m ³ | REL | NIOSH |

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection

| | |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eyes | Wear chemical safety glasses or goggles. |
| 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. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| Other | Not Available |

Other Recommendations

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

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance (physical state, color, etc.) | White solid. |
| Odor | Odorless. |
| Odor threshold | Not Available |
| pH | Not Available |
| Melting point/freezing point | 38°C (100.4°F) |
| Initial boiling point and boiling range | 652°C (1,206°F) |
| 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 | 2.71 (Water = 1) |
| Solubility (ies) | Soluble in methanol. Soluble in less than its own weight of water. In dilute aqueous solutions it will form insoluble oxychloride. Very soluble in dilute or concentrated hydrochloric acid, alcohol, ethyl acetate, glacial acetic acid, sodium hydroxide solution. Decomposed by hot water. |
| 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 moisture may affect product quality. Exposure to air may affect product quality. |
| Incompatible Materials | Hydrogen peroxide, strong bases, strong oxidizing agents, bromine trifluoride, hydrazine, ethylene oxide, metals, organic nitrates. |
| Hazardous Decomposition Products | Hydrogen chloride gas, tin oxides. |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Stannous Chloride, Dihydrate

| | |
|--------------------|-----------------------------|
| Skin | Not Available |
| Eyes | Not Available |
| Respiratory | Not Available |
| Ingestion | LD50 Oral - rat - 700 mg/kg |

Carcinogenicity

| | |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | Causes severe skin irritation or skin burns particularly on contact with moist or wet skin. |
| Eyes | Causes severe eye irritation or eye burns. |
| Respiratory | Causes chemical burns or burning irritation to the upper respiratory tract, coughing, wheezing. Irritation may lead to chemical pneumonitis and pulmonary edema. |
| Ingestion | Causes nausea, abdominal pain(cramping), vomiting, and diarrhea. Can cause burning of the lips, mouth tongue, throat, and stomach, stomach bleeding, reduced blood pressure. |

| | |
|---------------------------------------|--------------------------------------------------------------------------------------------------------|
| Chronic Toxicity | May cause damage to the following organs: blood, kidneys, lungs, liver, upper respiratory tract, skin. |
| Teratogenicity | Not Available |
| Mutagenicity | May affect genetic material. |
| Embryotoxicity | Not Available |
| Specific Target Organ Toxicity | Not Available |
| Reproductive Toxicity | May cause adverse reproductive effects and birth defects. |
| Respiratory/Skin Sensitization | Not Available |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Stannous Chloride, Dihydrate

| | |
|-----------------------------|---------------|
| 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 | Not Available |

13. DISPOSAL CONSIDERATIONS

| | |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste Product or 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 or residue. |
| Product Containers | 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. |

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 | UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Stannous chloride), 8, pg III |
| TDG | UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (STANNOUS CHLORIDE), 8, PG III |
| IMDG | UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (STANNOUS CHLORIDE), 8, PG III |
| Marine Pollutant | No |
| IATA/ICAO | UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Stannous chloride), 8, pg III |

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 |
| SARA 311 | Acute Health Hazard |
| SARA 312 | Acute Health Hazard |
| SARA 313 | Not Listed |
| WHMIS Canada | Class E: Corrosive material |

16. OTHER INFORMATION

| Revision | Date |
|------------|------------|
| Revision 1 | 08-27-2012 |
| Revision 2 | 12/06/2013 |
| Revision 3 | 05/11/2015 |

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.