# Material Safety Data Sheet

## Section 1 – Product and Company Identification

| **Product Name** | Stannic Chloride Anhydrate |
|---|---|
| **Chemical Name** | Tin(IV) Chloride Pentahydrate |
| **Chemical Formula** | $SnCl_4$ |
| **Company Identification** | Showa Kako Corporation<br>18-23, Yoshino-cho, Suita-city, Osaka 564-0054<br>JAPAN |
| **Telephone Number** | +81-6-6384-1501 |
| **24-hour Emergency Telephone Number** | +81-6-6384-1501 |
| **Fax Number** | +81-6-6384-2287 |

## Section 2 – Hazards Information

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| **Inhalation** | Dust from the product, if present, may cause respiratory information following an excessive inhalation exposure. |
| **Skin** | May produce skin irritation. |
| **Eyes** | May cause eye irritation. |
| **Ingestion** | Not expected to present a significant ingestion hazards under anticipated condition of normal use. |

### GHS Classification

### Physical Hazards

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| **Corrosive to metals** | Category 1 |

### Health Hazards

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| **Acute toxicity** | Category 4 |
| **Skin corrosion** | Category 1C |
| **Serious eye damage/ eye irritation** | Category 1 |
| **Germ cell mutagenicity** | Category 2 |
| **Carcinogenicity** | Category 2 |
| **Specific target organs/ systemic toxicity following single exposure** | Category 1(Respiratory system, Central nervous systems)<br>Category 3(Respiratory tract irritation, Narcotic effects) |
| **Specific target organs/ systemic** | Category 1(Liver, Central nervous |

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| **toxicity following repeated exposure** | systems, Lungs) |
| **Environmental Hazards** | |
| **Hazardous to the aquatic environment (acute)** | Category 2 |
| **Skin corrosion** | Category 2 |
| **GHS Symbol** |  |
| **Signal Word** | Danger |
| **Hazard Statements** | |
| H290 | May be corrosive to metals |
| H302 | Harmful if swallowed |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |
| H341 | Suspected of causing genetic defects |
| H351 | Suspected of causing cancer |
| H370 | Causes damage to organs （Respiratory system, Central nervous systems) |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |
| H372 | Causes damage to organs through prolonged or repeated exposure (Liver, Central nervous systems, Lungs) |
| H401 | Toxic to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects |
| **Precautionary Statements** | |
| P234 | Keep only in original container. |
| P264 | Wash hand and face, etc. thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P281 | Use personal protective equipment as required. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |

| **Response Statements** | |
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| P390 | Absorb spillage to prevent material-damage. |
| P330 | Rinse mouth. |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P363 | Wash contaminated clothing before reuse. |
| P304+P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P310 | Immediately call a POISON CENTER or doctor/physician. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P314 | Get medical advice/ attention if you feel unwell. |
| P391 | Collect spillage. |
| **Storage Statements** | |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P406 | Store in corrosive resistant/ container with a resistant inner liner. |
| **Disposal Statements** | |
| P501 | Dispose of contents/ container through a waste management company authorized by the local government. |

## Section 3 – Composition and Information on Ingredients

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| **Substance/Mixture** | Substance |
| **Chemical Name** | Tin(IV) Chloride Anhydrate |
| **CAS #** | 7646-78-8 |
| **Percent** | 99.5% min. |

## Section 4 – First Aid Measures

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| **Eyes** | Immediately flush eyes with copious amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult with ophthalmologist. |
| **Skin** | Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Consult |

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| | with a physician if symptoms occur. |
| **Ingestion** | Immediately wash mouth with plenty of water and give 1 - 2 cupfuls of milk or water if victim is conscious and alert. Consult with a physician. |
| **Inhalation** | Remove to fresh air, wash out nasal aperture and mouth with plenty of water. If breathing is difficult, give artificial respiration. If not breathing, give oxygen. Consult with a physician. |

## Section 5 – Fire Fighting Measures

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|---|---|---|
| **Flash Point** | | No data found |
| **Autoignition** | | None |
| **Explosion Limits** | **Lower** | No data found |
| | **Upper** | No data found |
| **Extinguish Media** | | Water, powder, carbon dioxide, foam |
| **Firefighting Instructions** | | Avoid non-firefighting equipped personnel to enter. Extinguish upwind from the fire wearing appropriate protective gear. |

## Section 6 – Accidental Release Measures

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| **Spills/ Leaks** | Evacuate area. Provide adequate ventilation. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Do not contact with skin. Do not inhale. Wash spill site after material pickup is complete. |

## Section 7 – Handling and Storage

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| **Handling** | Wear appropriate protective gear. Do not contact with eyes, skin and on clothing. Do not inhale. Handle with care. Wash mouth and hand after handling the material. |
| **Storage** | Keep container tightly closed. Avoid such conditions as direct sunlight and high piling. Store in low-humid, low-temperature area. |

## Section 8 – Exposure Controls, Personal Protection

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| **Engineering Controls** | Facilities storing or utilizing the material should be equipped with an eye wash facilities and a safety shower. Use adequate ventilation to keep airborne concentrations low. |
| **Exposure Limits** | No data found |
| **Personal Protective Equipment** | |
| **Eyes** | Safety goggles |

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| **Skin** | Rubber gloves |
| **Clothing** | Protective clothing and rubber boots |
| **Respirators** | Anti-dust mask |

## Section 9 – Physical and Chemical Properties

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| **Physical State** | Liquid |
| **Appearance** | Clear - Pale yellow |
| **Odor** | Irritating odor |
| **Boiling Point** | 114°C |
| **Melting Point** | -33°C |
| **Density** | 2.71 |
| **Viscosity** | No data found |
| **pH** | No data found |
| **Flash Point** | No data found |
| **Autoignition** | No data found |
| **Explosibility** | No data found |
| **Vapor Pressure** | No data found |
| **Vapor Density** | No data found |
| **Solubility** | It dissolves while generating heat to water and it is hydrolyzed.<br>Soluble in alcohol and ether. |

## Section 10 – Stability and Reactivity

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| **Stability** | It is smoking in air. |
| **Conditions to avoid** | Water and steam |
| **Incompatibilities with Other Material** | This product generates the hydrochloric acid reacting with water or steam.<br>It hydrolyzes intensely when coming in contact with the large quantity of water, and the white smoke of the hydrogen chloride and the smog of stannic oxide are generated. |
| **Hazardous Decomposition Product** | Hydrogen chloride, stannic oxide etc. |
| **Hazardous Polymerization** | Will not occur |

## Section 11 – Toxicological information

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| **RTECS #** | No data found |
| **LD50/ LC50** | IPR-MUS LD50: 99 mg/ kg<br>IPR-RAT LD50: 2300 mg/ $m^3$/ kg |
| **Carcinogenicity** | No data found |

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|---|---|
| **Mutagenicity** | No data found |
| **Reproductive Effects** | No data found |
| **Teratogenicity** | No data found |
| **Immunology** | No data found |
| **Irritation** | Causticity |
| **Others** | The nose, the throat, the airway, and lungs, etc. are strongly stimulated when inhaling, and it corrodes. The lung edema etc. might be caused.<br>It has the burning sensation and pains such as mouths and throats when swallowing, mucous membranes such as the gullet and digestive organs are corroded, and it is likely to punch. |

## Section 12 – Ecological Information

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| **Ecotoxicity** | No data found |
| **Environmental Standard** | No data found |

## Section 13 – Disposal Consideration

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| **Disposal Method** | Federal (national), state or local laws and regulations will determine the proper waste disposal method. |
| **Regulation Method** | Federal (national), state or local laws and regulations |

## Section 14 – Transport Information

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| **Shipping Name** | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S |
| **Hazard Class** | 8 |
| **UN #** | 1827 |
| **Packing Group** | III |

## Section 15 – Regulatory Information

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| **United States** | **TSCA** | No data found |
| **EC** | **EINECS** | Not on the list |
| **Canada** | **WHMIS** | No data found |
| **Japan** | **PRTR law** | Not on the list |

## Section 16 – Other Information

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|---|---|
| **MSDS Creation Date** | January 31, 2001 |
| **Revised Date** | April 12, 2013 |
| **Revised No.** | Revised 4th |

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