



JUNSEI

Material safety data sheet

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Catalog Numbers: 18495

Catalog Name: Tin(IV) chloride anhydrous

Company Identification:

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CREATION DATE: July 5, 2012

SECTION 2 HAZARDS IDENTIFICATION

Physical and chemical hazard

Flammable liquids : Out of category

Pyrophoric liquids : Out of category

Self-heating substances and mixtures : Out of category

Substances and mixtures which, in contact with water, emit flammable gases

: Out of category

Corrosive to metals : Category 1

Human health hazard

Acute toxicity Vapours : Category 1

Skin corrosion/Irritation : Category 1A-1B

Serious eye damage/eye irritation : Category 1

Specific target organ systemic toxicity(single exposure)

: Category 3(respiratory tract irritation)

Specific target organ systemic toxicity(repeated exposure)

: Category 1(lung)

Pictograms or symbol



Signal word : Danger

Hazard statement: May be corrosive to metals.

Fatal if inhaled.

Causes severe skin burns and eye damage.
Causes serious eye damage.
May cause respiratory irritation.
Causes damage to lung through prolonged or repeated exposure

Cautions

Safety measurements:

- Keep container tightly closed.
- Keep only in original container.
- Do not breathe mist/vapours/spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Wear respiratory protection.

First-aid measures:

- Absorb spillage to prevent material-damage.
- If on skin (or hair) : Remove/Take off immediately all contaminated clothing.
Rinse skin with water/shower. Wash contaminated clothing before reuse.
- If INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- If in eyes : Rinse cautiously with water for several minutes. Remove contact lenses , if present and easy to do. Continue rinsing.
- If swallowed : Rinse mouth. Do not induce vomiting.
- If on skin, if in eyes, if swallowed or if inhaled, immediately call a POISON CENTER or doctor/physician.
- Get medical advice/attention if you feel unwell.

Storage

- Store in corrosive resistant/ container with a resistant inner liner.
- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.

Disposal

- Dispose of contents and containers appropriately in accordance with related regulations.

SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

Substance/Mixture : Substance

Component : Tin(IV) chloride anhydrous

Chemical formula : SnCl_4

Cas number : 7646-78-8

US TSCA inventory : Registered

EC number (EINECS): 231-588-9

JAPAN number (ENCS): 1-260

Content: (EP) 98.0 +%

SECTION 4 FIRST AID MEASURES

If inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

If on skin : Remove/Take off immediately all contaminated clothing. Rinse
skin with water/shower. Immediately call a POISON CENTER or
doctor/physician.
If in eyes : Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical advice/attention.
If swallowed : Rinse mouth. Do not induce vomiting.
Immediately call a POISON CENTER or doctor/physician.

SECTION 5 FIRE FIGHTING MEASURES

The substance is incombustible.

Extinguishing media: Water spray, dry chemical powder, alcohol-resistant foam, carbon dioxide.

Prohibited extinguishing media : Straight streams of water.

Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

Protection for firefighters : Firefighters should wear protective equipment.

SECTION 6 ACCIDENTAL RELEASE MEASURES

General Information : Use proper personal protective equipment as indicated in Section 8.

Cautions for environment : Avoid release to the rivers, lakes, ocean, groundwater.

Spills/Leak : Vacuum or sweep up material and place into a suitable disposal container.

SECTION 7 HANDLING AND STORAGE

Handling : Avoid breathing dust, fumes. Avoid contact with skin and eyes.

Use only in a chemical fume hood.

Do not eat, drink or smoke when using this product.

Storage: : Store locked up.

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

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls : Use adequate ventilation to keep airborne concentrations low.

Occupational exposure limits: -

Personal protective equipment :

Eye Protection : Goggles

Hand Protection : Protective gloves

Skin and body protection : Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection : Wear respiratory protection.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Liquid

Appearance : Colourless or slightly yellow solution

Odor : Pungent odor
pH : No data available
Melting Point: -33°C
Boiling Point : 114.15°C
Explosion Limits, lower : No data available
Explosion Limits, upper : No data available
Vapor Pressure : No data available
Specific Gravity/Density: 2.34 g/cm³
Solubility in water : insoluble
Distribut.coeff. n-octanol/water: No data available
Autoignition Temperature : No data available
Decomposition Temperature : No data available
Molecular Formula : SnCl₄
Molecular Weight : 260.52

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability : Reacts violently with water and moist air.
Conditions to Avoid : Contact with water and incompatible dangerous goods.
Incompatibilities with Other Materials : Turpentine, alcohols and amines.
Hazardous Decomposition Products: Hydrogen chloride.
Hazardous Polymerization : Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral : Not possible to classify because of no data.

Dermal : Not possible to classify because of no data.

Gas : Not applicable (GHS definition).

Vapours : Classified into category 1 based on rat inhalation LC₅₀ value of 2,300 mg/m³/10min (RETCS, 2004), 0.47mg/L was obtained as a value for 4 hours.

Dusts and mists : Not possible to classify because of no data.

Skin corrosion/Irritation: Classified into category 1A-1B based on the description that this substance is caustic to the eye and skin and airways, that shows caustic when oral ingestion is carried out (ICSC, 2004), that causes a burn injury on the skin, and that stimulates skin and eyes and respiratory tracts (HSDB, 2003).

Serious eye damage/eye irritation: Classified into category 1 based on the description, with this product, the caustic is indicated to eye, skin, and respiratory tract, and caustic is indicated if oral ingestion is done (ICSC, 2004), and skin, eye, and respiratory tract are stimulated (HSDB, 2003).

Respiratory sensitization: Not possible to classify because of no data.

Skin sensitization: Not possible to classify because of no data.

Mutagenicity: Not possible to classify because of insufficient data.

Carcinogenic effects: Not possible to classify because of no data.

Effects on the reproductive system: Classified into Category 3 (respiratory irritant) based on the description that this product indicates respiratory tracts caustics (ICSC, 2004) and respiratory irritant (HSDB, 2003), and that an inorganic tin compound indicates respiratory irritant (ACGIH-TLV (2006)).

Specific target organ systemic toxicity single exposure: Classified into Category 1 (lung).based on the description that it has a risk of pneumoconiosis by as an inorganic tin compound (ACGIH-TLV (2006)), and the effect on the respiratory system is observed in the this product etc. in occupational exposure study (HSDB, 2003).

Specific target organ systemic toxicity repeated exposure:

Not possible to classify because of insufficient data.

Aspiration hazard: Not possible to classify because of no data.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

Hazardous to the aquatic environment (acute) : Classified into out of category based on the 96h r. LC₅₀ >1000mg/L of fishes (Zebrafish) (IUCLID, 2000).

Hazardous to the aquatic environment (chronic) : Since it was not water-insolubility and acute toxicity was low, it was carried out the outside of Category.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 TRANSPORT INFORMATION

IATA	Shipping Name: Stannic Chloride, Anhydrous Hazard Class: 8 (Corrosive substances) UN Number: 1827 Packing Group: II
IMO	Shipping Name: STANNIC CHLORIDE, ANHYDROUS Hazard Class: 8 (Corrosive substances) UN Number: 1827 Packing Group: II Marine pollutant: yes
RID/ADR	Shipping Name: Stannic Chloride, Anhydrous Hazard Class: 8 (Corrosive substances) UN Number: 1827 Packing Group: II

SECTION 15 REGULATORY INFORMATION

Fire Service Act : Not regulated

Poisonous and Deleterious Substances Control Act : Article 2 (2) Deleterious Substances, Attached Table 2-69 (Tin compounds, inorganic)

Industrial Safety and Health Act : Article 18-2, Attached Table 9-322 of Cabinet order (Tin and its compounds, >=0.1)

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (MSDS required) (Effective from October 1, 2009)

: Not regulated

Ordinance for Enforcement of the Civil Aeronautics Act

: Article 194 in Regulation (viii) Corrosive substance
Regulations for the carriage and storage of dangerous goods in ship
: Article 2 Corrosive substances

Substance Registration :
Australia (AICS) : Registration
Canada(DSL) : Registration
Korea number (ECL) : KE-33876
China(IECSC) : Registration

SECTION 16 OTHER INFORMATION

REFERENCES:

- The Merck Index 14 edition, Monographs No. 8874
- Chemical Risk Information Platform (CHRIP)
- Information about the status of the implementation of GHS in Japan (ID= 1283 Stannane, tetrachloro-).
- Registry of Toxic Effects of Chemical Substances, No : XP8750000 [Tin(IV) chloride (1:4)] .
- Hazardous Substances Data Bank (HSDB)
- International Chemical Safety Cards (ICSC) No. 0953 [TIN(IV) CHLORIDE (ANHYDROUS)] .

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.
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