

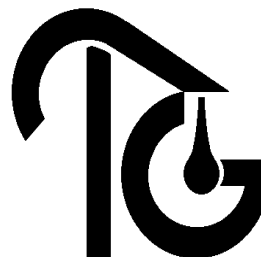
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PRODUCT DATA SHEET

(This booklet incorporates the Specification and M.S.D.S.)

PRODUCT		STANNOUS CHLORIDE ANHYDROUS	
CAS NO.		7772-99-8	
TARIFF NO.		2827 3910	
U.N NO.		3260	
EINECS NO.		231-868-0	
IMCO CLASS			
HAZARDS		CORROSIVE HARMFUL IF SWALLOWED CAUSES BURNS	
SPECIFICATION REFERENCE	STCHAN/1	DATE	MAY 09
REFERENCE NO.	STCHAN/1	DATE	MAY 09
PREVIOUS EDITION.		DATE	

PRODUCT SPECIFICATION

Product Name	Stannous Chloride Anhydrous
Alternative Name	
Product Grade	

SALES SPECIFICATION

Product Data	
Chemical Formula	SnCl ₂
Molecular Weight	189.6 g/mol
Density	3.9 g/cm ³ (20°C = 293K)
Bulk Density	1.9 kg/l approx
Solubility	Soluble in diluted hydrochloric acids
Delivery Form	Crystalline powder
Colour	White

Analysis	Specification	Typical
SnCl ₂	99% min	≈ 99.5%
Total Tin Content	62% min	≈ 62.3%
Tetravalent Tin Content	<0.3%	≈ 0.2%
Other Elements	<0.1%	

Application

Electroplating Industry: For metal surface treatment in high speed tin baths

Chemical Industry: For the production of tin chemicals

Textile Industry: For dyeing process

Storage

Stannous Chloride has a shelf life of min. 12 months if kept dry and tightly closed in the original packaging. It should be protected against the light

NOTES

Exclusion of Liability

Information contained in this publication is accurate to the best of the knowledge and belief of Tennants.

Any information or advice obtained from Tennants otherwise than by means of this publication and whether relating to Tennants materials or other materials, is also given in good faith. However, it remains at all times the responsibility of the customer to ensure that Tennants materials are suitable for the particular purpose intended.

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Health and Safety


A Material Safety Data Sheet has been issued describing the health, safety and environmental properties of this product, identifying the potential hazards and giving advice on the handling precautions and emergency procedures. This must be consulted fully before handling, storage and use.

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product:	Stannous Chloride Anhydrous
Use:	Galvanic bath
COMPANY:	TENNANTS DISTRIBUTION LIMITED
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2. HAZARDS IDENTIFICATION

Hazard Designation	 C Corrosive
Particular Dangers For Man/Environment	The product has been labelled due to the calculation procedure of the 'General Classification Guideline for preparations of the EU' in the latest valid form The classification was made according to EC lists, latest edition, company and literature data R22 Harmful R34 Causes burns
Classification System	The classification was made according to the EC lists, latest edition, company and literature data have also been used
Danger	Causes severe skin burns and eye damage
Warning	Harmful if swallowed
Prevention	Do not breathe dust/fumes/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection
Response	If swallowed: Call a poison centre or doctor/physician if you feel unwell If swallowed: Rinse mouth. Do NOT induce vomiting If on skin (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower If inhaled: Remove 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 Immediately call a poison centre or doctor/physician Specific treatment (see label) Rinse mouth Wash contaminated clothing before reuse
Storage	Store locked up
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterisation	Tin(II)-chloride
Description	Mixture of substances listed below and harmless substances
Dangerous Components	% CAS No. EINECS No. Classification
Stannous Chloride	75 – 100 7772-99-8 231-868-0 C, Xn; R22-34
Additional Information	For the wording of the listed risk phrases refer to Section 16

4. FIRST AID MEASURES

General Information	Remove contaminated clothing. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident
After Inhalation	Supply fresh air; consult doctor in case of symptoms
After Skin Contact	Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor
After Eye Contact	Rinse opened eye for several minutes under running water. Then consult doctor
After Swallowing	Drink large quantities of water, do not induce vomiting. Consult a physician immediately

5. FIRE FIGHTING MEASURES	
Extinguishing Media	Use fire fighting measures that suit the environment
Special Hazards Of The Material	Can be released in case of fire: Halogen hydracids(s), tin oxide
Protective Equipment for Fire Fighting	Wear self contained breathing apparatus
6. ACCIDENTAL RELEASE MEASURES	
Personal Precautions	Wear protective equipment. Keep unprotected persons away
Environmental Precautions	Do not allow product to reach sewage system or water bodies. Do not allow to enter ground/soil
Measures For Clean Up	Use neutralising agent. Dispose of contaminated material as waste according to Section 13. Ensure adequate ventilation
7. HANDLING AND STORAGE	
Safe Handling Advice	No special measures required
Protection Against Fire & Explosion	No special measures required
Storage	No special measures required
Further Storage Information	Keep containers tightly sealed
Storage Class	8
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
Occupational Exposure Limits	7772-99-9 Stannous Chloride WEL Short Term Value: 4 mg/m ³ Long Term Value 2 mg/m ³ as Sn
Additional Information	The lists that were valid during the compilation were used as a basis
General Protective/Hygiene Measures	Do not eat, drink or smoke when working. Take off immediately all contaminated clothing. Wash hands during breaks and at the end of work. Avoid contact with eyes and skin
Respiratory Protection	In case of formation of vapours/dust: Filter P2
Hand Protection	Rubber gloves. The glove material has to be impermeable and resistant to the product/substance/preparation
Material Of Gloves	Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Penetration Time Of Glove Material	The selection of the suitable gloves does not only depend on the material but also on further marks of quality and varies from manufacturer to manufacturer The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed
Eye Protection	Tightly sealed safety glasses
Body Protection	Suitable clothing
9. PHYSICAL AND CHEMICAL PROPERTIES	
Physical State	Crystalline, colourless
Odour	Odourless
Melting Point/Range	ca. 247°C
Boiling Point/Range	623°C
Flash Point	Not applicable
Self Inflammability	Product is not self igniting
Danger Of Explosion	Product is not explosive
Specific Gravity	Not determined
Solubility In/Miscibility In Water at 20°C	2700 g/l
pH Value at 20°C	2
Solvent Content: Organic Solvents	0.0%
Solids Content	100.0%
10. STABILITY AND REACTIVITY	
Thermal Decomposition/Conditions To Be Avoided	No decomposition if used according to specifications
Dangerous Reactions	Reacts with strong oxidising agents. Reacts with acids
Dangerous Products Of Decomposition	No dangerous decomposition products known
11. TOXICOLOGICAL INFORMATION	
Acute Toxicity	7772-99-8 Stannous Chloride LD50 Oral Rat 700 mg/kg
Primary Irritant Effect	
On The Skin	Caustic effect on the skin and mucous membranes
On The Eye	Strong caustic effect
Sensitisation	No sensitising effect known
Additional Toxicological Information	The product shows the following dangers according to the calculation method

of the General EC Classification Guidelines for Preparations are issued in the latest version:

Harmful, Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach

12. ECOLOGICAL INFORMATION

General Notes	Water hazard class 1 (German Regulation) (Self Assessment): Slightly hazardous for water Do not allow undiluted product or large quantities to reach ground water, water bodies or sewage system Must not reach sewage system or drainage ditch undiluted or unneutralised
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13. DISPOSAL CONSIDERATIONS

Recommendation For Product Disposal	Must be specially treated in accordance with all local and national regulations
Uncleaned Packaging	Disposal must be made according to official regulations
Recommended Cleaning Agent	Water, if necessary with cleaning agent

14. TRANSPORT INFORMATION

ADR/RID	
ADAR/RID-GGVSE Class	8 (C2) Corrosive Substances
Kemler Number	80
UN Number	3260
Packaging Group	II
Label	8
Designation Of Goods	3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (stannous chloride)
IMDG	
IMDG Class	8
UN Number	3260
Label	8
Packaging Group	II
EmS Number	F-A, S-B
Marine Pollutant	No
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (stannous chloride anhydrous)
ICAO/IATA	
ICAO/IATA Class	8
UN/ID Number	3260
Label	8
Packaging Group	II
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (stannous chloride anhydrous)
UN 'Mode Regulation'	UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC N.O.S., 8, II

15. REGULATORY INFORMATION

Designation According To EC Guidelines	The product has been classified and labelled in accordance with EC Directives/Ordinance on Hazardous Materials
Code Letter And Hazard Designation Of The Product	 C Corrosive
Hazard Determining Components Of Labelling	Stannous Chloride
R phrases	R22 Harmful if swallowed R34 Causes burns
S phrases	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S36/37/39 Wear suitable protective clothing, gloves and eye/face protection S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) S60 This material and its container must be disposed of as hazardous waste
National Regulations	
Water Hazard Class	Water hazard class 1 (self-assessment): slightly hazardous to water

16. OTHER INFORMATION

Relevant R Phrases
R22 Harmful if swallowed

R34 Causes burns
