



PMD (UK) LIMITED

SAFETY DATA SHEET SILVER STRIPPING SALTS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name SILVER STRIPPING SALTS
Product number 169001, 169002, 999CJG, TS119

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Metal surface treatment

1.3. Details of the supplier of the safety data sheet

Supplier PMD (UK) Limited
 Broad Lane
 Coventry
 CV5 7AY
 Tel: 024 764 666 91
 Fax: 024 764 730 34
 stevel@pmdgroup.co.uk

1.4. Emergency telephone number

Emergency telephone 024 764 666 91 (Mon-Fri 8.30-17.00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Acute Tox. 2 - H300 Acute Tox. 1 - H310 Acute Tox. 2 - H330 STOT SE 1 - H370 STOT RE 1 - H372
Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.
 H370 Causes damage to organs .
 H372 Causes damage to organs through prolonged or repeated exposure.
 H410 Very toxic to aquatic life with long lasting effects.

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Precautionary statements	<p>P260 Do not breathe dust.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P361+P364 Take off immediately all contaminated clothing and wash it before reuse.</p>
Supplemental label information	EUH032 Contact with acids liberates very toxic gas.
Contains	POTASSIUM CYANIDE
Supplementary precautionary statements	<p>P262 Do not get in eyes, on skin, or on clothing.</p> <p>P273 Avoid release to the environment.</p> <p>P284 [In case of inadequate ventilation] wear respiratory protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor.</p> <p>P391 Collect spillage.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

POTASSIUM CYANIDE			30-60%
CAS number: 151-50-8	EC number: 205-792-3	REACH registration number: 01-2119486407-29-XXXX	
M factor (Acute) = 10	M factor (Chronic) = 10		
Classification			
Met. Corr. 1 - H290			
Acute Tox. 2 - H300			
Acute Tox. 1 - H310			
Acute Tox. 2 - H330			
STOT SE 1 - H370			
STOT RE 1 - H372			
Aquatic Acute 1 - H400			
Aquatic Chronic 1 - H410			
POTASSIUM FERROCYANIDE			30-60%
CAS number: 13943-58-3	EC number: 237-722-2		
Classification			
Aquatic Chronic 3 - H412			

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	CAUTION! First aid personnel must be aware of own risk during rescue! Remove affected person from source of contamination. Get medical attention.
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Inhalation	Move affected person to fresh air at once. Get medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	Get medical attention immediately. Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Remove affected person from source of contamination. Give plenty of water to drink. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Fatal if inhaled.
Ingestion	Very toxic if swallowed.
Skin contact	Toxic in contact with skin.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Do not touch or walk into spilled material. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Inform authorities if large amounts are involved.

6.4. Reference to other sections

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Avoid handling which leads to dust formation. Do not use in confined spaces without adequate ventilation and/or respirator.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from the following materials: Acids. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store in closed original container at temperatures between 5°C and 30°C.

Storage class Toxic storage.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

POTASSIUM CYANIDE

Long-term exposure limit (8-hour TWA): WEL 5(CN) mg/m³

WEL = Workplace Exposure Limit

POTASSIUM CYANIDE (CAS: 151-50-8)

DNEL	Workers - Inhalation; Long term systemic effects: 0.94 mg/m ³ Workers - Inhalation; Short term systemic effects: 12.5 mg/m ³ Workers - Dermal; Long term systemic effects: 0.14 mg/kg/day Workers - Dermal; Short term systemic effects: 4.03 mg/kg/day
PNEC	- Fresh water; 1 µg/l - Marine water; 0.2 µg/l - Intermittent release; 3.2 µg/l - STP; 50 µg/l - Sediment; 0.004 mg/kg - Sediment (Marinewater); 0.0008 mg/kg - Soil; 0.007 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Dust-resistant, chemical splash goggles.

Hand protection

Use protective gloves.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

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Hygiene measures Use engineering controls to reduce air contamination to permissible exposure level. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection Wear a suitable dust mask.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Crystalline solid.
Colour	Light (or pale). Yellow.
Odour	Almond.
pH	pH (diluted solution): >10 10%
Melting point	Not known.
Initial boiling point and range	Not applicable.
Vapour pressure	Not applicable.
Relative density	Not available.
Solubility(ies)	Soluble in water.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Inorganic cyanides.

10.2. Chemical stability

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid Avoid contact with acids. Generates very toxic gas in contact with acid.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products Toxic gases/vapours/fumes of: Hydrogen cyanide (HCN).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 8.61

Acute toxicity - dermal

ATE dermal (mg/kg) 8.61

Acute toxicity - inhalation

ATE inhalation (gases ppm) 172.12

ATE inhalation (vapours mg/l) 0.86

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ATE inhalation (dusts/mists mg/l)	0.09
Inhalation	Very toxic by inhalation. Unconsciousness, possibly death.
Ingestion	Very toxic if swallowed. Unconsciousness, possibly death.
Skin contact	Toxic through skin absorption (percutaneous).
Eye contact	Severe irritation, burning and tearing.
Acute and chronic health hazards	Gas or vapour is toxic or extremely irritating, even on brief exposure. Gas or vapour displaces oxygen available for breathing (asphyxiant). This chemical can be hazardous when inhaled and/or touched. Toxic through skin absorption (percutaneous). Repeated exposure may cause chronic eye irritation. Exposure may cause: Unconsciousness. Death.
Route of exposure	Inhalation Skin absorption Ingestion. Skin and/or eye contact
Medical symptoms	Cyanosis (blue tissue condition - nails, lips and/or skin).

Toxicological information on ingredients.

POTASSIUM CYANIDE

Inhalation	Very toxic by inhalation. Unconsciousness, possibly death.
Ingestion	Very toxic if swallowed. Unconsciousness, possibly death.
Skin contact	Toxic through skin absorption (percutaneous).
Eye contact	Severe irritation, burning and tearing.
Acute and chronic health hazards	Gas or vapour is toxic or extremely irritating, even on brief exposure. Gas or vapour displaces oxygen available for breathing (asphyxiant). This chemical can be hazardous when inhaled and/or touched. Toxic through skin absorption (percutaneous). Repeated exposure may cause chronic eye irritation. Exposure may cause: Unconsciousness. Death.
Route of exposure	Inhalation Skin absorption Ingestion. Skin and/or eye contact
Medical symptoms	Cyanosis (blue tissue condition - nails, lips and/or skin).

SECTION 12: Ecological Information

Ecotoxicity Dangerous for the environment if discharged into watercourses.

Ecological information on ingredients.

POTASSIUM CYANIDE

Ecotoxicity Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

Ecological information on ingredients.

POTASSIUM CYANIDE

Toxicity Very toxic to aquatic organisms.

Acute aquatic toxicity

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LE(C) ₅₀	0.01 < L(E)C ₅₀ ≤ 0.1
M factor (Acute)	10
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.042 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.041 mg/l, Daphnia magna
<u>Chronic aquatic toxicity</u>	
NOEC	0.0001 < NOEC ≤ 0.001
Degradability	Rapidly degradable
M factor (Chronic)	10

12.2. Persistence and degradability

Ecological information on ingredients.

POTASSIUM CYANIDE

Persistence and degradability	The product is biodegradable.
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12.3. Bioaccumulative potential

12.4. Mobility in soil

Ecological information on ingredients.

POTASSIUM CYANIDE

Mobility	The product is soluble in water.
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12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods	React with sodium hypochlorite to destroy. Check that all cyanide has been destroyed with starch iodide paper. Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
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SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1680
UN No. (IMDG)	1680
UN No. (ICAO)	1680
UN No. (ADN)	1680

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	POTASSIUM CYANIDE, SOLID
Proper shipping name (IMDG)	POTASSIUM CYANIDE, SOLID
Proper shipping name (ICAO)	POTASSIUM CYANIDE, SOLID

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Proper shipping name (ADN) POTASSIUM CYANIDE, SOLID

14.3. Transport hazard class(es)

ADR/RID class	6.1
ADR/RID classification code	T5
ADR/RID label	6.1
IMDG class	6.1
ICAO class/division	6.1
ADN class	6.1

Transport labels



14.4. Packing group

ADR/RID packing group	I
IMDG packing group	I
ADN packing group	I
ICAO packing group	I

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

IMDG Code segregation group	6. Cyanides
EmS	F-A, S-A
ADR transport category	1
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	66
Tunnel restriction code	(C/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

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National regulations	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
EU legislation	Dangerous Substances Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

Key literature references and sources for data	Dangerous Properties of Industrial Chemicals, N.Sax, Croner's: Dangerous Substances. Croner's: Emergency Spillage Guide. Croner's: Substances Hazardous to Health. Material Safety Data Sheet, Misc. manufacturers.
Revision date	21/11/2017
Revision	2
Supersedes date	10/09/2015
Hazard statements in full	H290 May be corrosive to metals. H300 Fatal if swallowed. H310 Fatal in contact with skin. H330 Fatal if inhaled. H370 Causes damage to organs . H370 Causes damage to organs if inhaled. H372 Causes damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

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