



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.

## SILVER STRIPPING SALTS

<b>Precautionary statements</b>	<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>
<b>Supplemental label information</b>	EUH032 Contact with acids liberates very toxic gas.
<b>Contains</b>	POTASSIUM CYANIDE
<b>Supplementary precautionary statements</b>	<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

<b>POTASSIUM CYANIDE</b>			<b>30-60%</b>
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		
<b>Classification</b>			
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			
<b>POTASSIUM FERROCYANIDE</b>			<b>30-60%</b>
CAS number: 13943-58-3	EC number: 237-722-2		
<b>Classification</b>			
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

<b>General information</b>	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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<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Skin contact</b>	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.
<b>Eye contact</b>	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

<b>Inhalation</b>	Fatal if inhaled.
<b>Ingestion</b>	Very toxic if swallowed.
<b>Skin contact</b>	Toxic in contact with skin.

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

<b>Notes for the doctor</b>	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

## SILVER STRIPPING SALTS

### 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/m<sup>3</sup>

WEL = Workplace Exposure Limit

#### POTASSIUM CYANIDE (CAS: 151-50-8)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 0.94 mg/m <sup>3</sup> Workers - Inhalation; Short term systemic effects: 12.5 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 0.14 mg/kg/day Workers - Dermal; Short term systemic effects: 4.03 mg/kg/day
<b>PNEC</b>	- 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

<b>Appearance</b>	Crystalline solid.
<b>Colour</b>	Light (or pale). Yellow.
<b>Odour</b>	Almond.
<b>pH</b>	pH (diluted solution): >10 10%
<b>Melting point</b>	Not known.
<b>Initial boiling point and range</b>	Not applicable.
<b>Vapour pressure</b>	Not applicable.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	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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<b>ATE inhalation (dusts/mists mg/l)</b>	0.09
<b>Inhalation</b>	Very toxic by inhalation. Unconsciousness, possibly death.
<b>Ingestion</b>	Very toxic if swallowed. Unconsciousness, possibly death.
<b>Skin contact</b>	Toxic through skin absorption (percutaneous).
<b>Eye contact</b>	Severe irritation, burning and tearing.
<b>Acute and chronic health hazards</b>	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.
<b>Route of exposure</b>	Inhalation Skin absorption Ingestion. Skin and/or eye contact
<b>Medical symptoms</b>	Cyanosis (blue tissue condition - nails, lips and/or skin).

### Toxicological information on ingredients.

#### POTASSIUM CYANIDE

<b>Inhalation</b>	Very toxic by inhalation. Unconsciousness, possibly death.
<b>Ingestion</b>	Very toxic if swallowed. Unconsciousness, possibly death.
<b>Skin contact</b>	Toxic through skin absorption (percutaneous).
<b>Eye contact</b>	Severe irritation, burning and tearing.
<b>Acute and chronic health hazards</b>	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.
<b>Route of exposure</b>	Inhalation Skin absorption Ingestion. Skin and/or eye contact
<b>Medical symptoms</b>	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) <sub>50</sub>	0.01 < L(E)C <sub>50</sub> ≤ 0.1
M factor (Acute)	10
Acute toxicity - fish	LC <sub>50</sub> , 96 hours: 0.042 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC <sub>50</sub> , 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

## SILVER STRIPPING SALTS

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



## SILVER STRIPPING SALTS

<b>National regulations</b>	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.
<b>EU legislation</b>	Dangerous Substances Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.
<b>Guidance</b>	Workplace Exposure Limits EH40.

### 15.2. Chemical safety assessment

#### SECTION 16: Other information

<b>Key literature references and sources for data</b>	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.
<b>Revision date</b>	21/11/2017
<b>Revision</b>	2
<b>Supersedes date</b>	10/09/2015
<b>Hazard statements in full</b>	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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