Precious Metal Sales, Inc.

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/08/2020 *Reviewed on 05/28/2020*

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1 Identification

· **Product identifier**

· **Trade name:** Silver(I) potassium cyanide $KAg(CN)_2$

· **Article number:**
400011282 25 kg salt
400008086 1 kg salt
400014487 1 kg salt (MFR)
200017515 25 av. oz Ag
200017512 100 av. oz Ag
200017516 500 av. oz Ag
400022689 500 g salt
400007246 10 kg salt
400007247 2 kg salt
200039474 2 kg (EX)
200039473 2 kg (MJP)
400027017 5 kg
400027016 5kg (MFR)

· **CAS Number:**
506-61-6

· **EC number:**
208-047-0

· **Index number:**
006-007-00-5

· **Application of the substance / the mixture** Raw material for plating baths

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

· Precious Metal Sales, Inc.
100 New Wood Road
Watertown, CT 06795
Tel. 860-274-8813
Fax. 860-274-8815

Email: Here4u@pmsalesinc.com

· **Emergency telephone number:**
CHEMTREC (24 HOURS)
Phone: 1-800-424-9300

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2 Hazard(s) identification

· **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 1 H300 Fatal if swallowed.

(Contd. on page 2)

Precious Metal Sales, Inc.

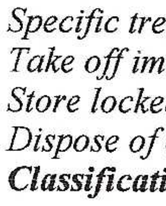
Safety Data Sheet
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(Contd. of page 1)

Acute Tox. 1 H310 Fatal in contact with skin.
Acute Tox. 1 H330 Fatal if inhaled.



GHS05 Corrosion

Met. Corr.1 H290 May be corrosive to metals.
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

· **Label elements**
· **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms** *GHS05, GHS06*
· **Signal word** *Danger*

· **Hazard-determining components of labeling:**
potassium dicyanoargentate
· **Hazard statements**
May be corrosive to metals.
Fatal if swallowed, in contact with skin or if inhaled.
Causes severe skin burns and eye damage.
· **Precautionary statements**
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Immediately call a poison center/doctor.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment is urgent.
Take off immediately all contaminated clothing and wash it before reuse.
Store locked up.
Dispose of contents/container in accordance with national regulations.
· **Classification system:**



Health = 4
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



*Health = *4*
Fire = 0
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** *Not applicable.*
· **vPvB:** *Not applicable.*

3 Composition/information on ingredients

· **Chemical characterization: Substances**
· **CAS No. Description**
506-61-6 potassium dicyanoargentate
· **Identification number(s)**
· **EC number:** *208-047-0*

(Contd. on page 3)

(Contd. of page 2)

· **Index number:** 006-007-00-5

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Remove breathing apparatus only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
· **After inhalation:**
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** Do not induce vomiting; immediately call for medical help.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:**
Fire fighters should wear NIOSH/HSHA-approved pressure demand self-contained breathing apparatus.
Wear chemical and flame resistant clothing, boots, hats (hard), and gloves.

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6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Mouth respiratory protective device.
· **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**
2.9 mg/m³
· **PAC-2:**
32 mg/m³
· **PAC-3:**
190 mg/m³

(Contd. on page 4)

(Contd. of page 3)

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
No special measures required.
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Do not store together with acids.
· **Further information about storage conditions:** Keep receptacle tightly sealed.
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
506-61-6 potassium dicyanoargentate	
PEL (USA)	Long-term value: 0.01 mg/m³ as Ag
REL (USA)	Long-term value: 0.01 mg/m³ as Ag
TLV (USA)	Long-term value: 0.01 mg/m³ as Ag

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
· **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**



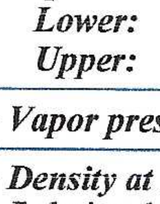
Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
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.

(Contd. on page 5)

(Contd. of page 4)

· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**



Tightly sealed goggles

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Crystalline
Color:	White
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.
· **pH-value:**	Not applicable.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Product is not flammable.
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Not determined.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure:**	Not applicable.
· **Density at 20 °C (68 °F):**	2.36 g/cm³ (19.69 lbs/gal)
· **Relative density**	Not determined.
· **Vapor density**	Not applicable.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with**	
Water:	Fully miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
VOC content:	0.00 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

(Contd. on page 6)

(Contd. of page 5)

· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
506-61-6 potassium dicyanoargentate		
Oral	LD50	20.9 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
Substance is not listed.
· **NTP (National Toxicology Program)**
Substance is not listed.
· **OSHA-Ca (Occupational Safety & Health Administration)**
Substance is not listed.

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12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Very toxic for fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 3 (Assessment by list): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 7)

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(Contd. of page 6)

· ***Uncleaned packagings:***
· ***Recommendation:*** *Disposal must be made according to official regulations.*
· ***Recommended cleansing agent:*** *Water, if necessary with cleansing agents.*

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14 Transport information

· ***UN-Number***	
· ***DOT, ADR, IMDG, IATA***	*UN1588*
· ***UN proper shipping name***	
· ***DOT***	*Cyanides, inorganic, solid, n.o.s.*
· ***ADR***	*1588 CYANIDES, INORGANIC, SOLID, N.O.S. (potassium dicyanoargentate)*
· ***IMDG***	*CYANIDES, INORGANIC, SOLID, N.O.S. (potassium dicyanoargentate), MARINE POLLUTANT*
· ***IATA***	*CYANIDES, INORGANIC, SOLID, N.O.S. (potassium dicyanoargentate)*
· ***Transport hazard class(es)***	
· ***DOT***	



· ***Class***	*6.1 Toxic substances*
· ***Label***	*6.1*
· ***ADR***	



· ***Class***	*6.1 (T5) Toxic substances*
· ***Label***	*6.1*
· ***IMDG, IATA***	



· ***Class***	*6.1 Toxic substances*
· ***Label***	*6.1*
· ***Packing group***	
· ***DOT, ADR, IMDG, IATA***	*II*
· ***Environmental hazards:***	
· ***Marine pollutant:***	*Yes*
· ***Special precautions for user***	*Warning: Toxic substances*
· ***Danger code (Kemler):***	*60*
· ***EMS Number:***	*F-A,S-A*
· ***Segregation groups***	*Cyanides*
· ***Stowage Category***	*A*
· ***Segregation Code***	*SG35 Stow "separated from" SGG1-acids*
· ***Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code***	*Not applicable.*

(Contd. on page 8)

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(Contd. of page 6)

· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 25 kg On cargo aircraft only: 100 kg
· **Hazardous substance:**	1 lbs, 0.454 kg
· **ADR**	
· **Excepted quantities (EQ)**	Code: E4 Maximum net quantity per inner packaging: 1 g Maximum net quantity per outer packaging: 500 g
· **IMDG**	
· **Limited quantities (LQ)**	500 g
· **Excepted quantities (EQ)**	Code: E4 Maximum net quantity per inner packaging: 1 g Maximum net quantity per outer packaging: 500 g
· **UN "Model Regulation":**	UN 1588 CYANIDES, INORGANIC, SOLID, N.O.S. (POTASSIUM DICYANOARGENTATE), 6.1, II

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15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**
Substance is listed.

· **Section 313 (Specific toxic chemical listings):**
Substance is listed.

· **TSCA (Toxic Substances Control Act):**
ACTIVE

· **Hazardous Air Pollutants**
Substance is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**
Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**
Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:**
Substance is listed.

· **Chemicals known to cause developmental toxicity:**
Substance is not listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**
II

· **TLV (Threshold Limit Value established by ACGIH)**
Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
Substance is not listed.

· **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 9)

(Contd. of page 6)

· **Hazard pictograms** GHS05, GHS06
· **Signal word** Danger

· **Hazard-determining components of labeling:**
potassium dicyanoargentate
· **Hazard statements**
May be corrosive to metals.
Fatal if swallowed, in contact with skin or if inhaled.
Causes severe skin burns and eye damage.
· **Precautionary statements**
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Immediately call a poison center/doctor.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment is urgent.
Take off immediately all contaminated clothing and wash it before reuse.
Store locked up.
Dispose of contents/container in accordance with national regulations.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 09/08/2020 / -
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 1: Acute toxicity – Category 1
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
· *** Data compared to the previous version altered.**