### Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 8/23/2023 Version: 1.0

#### **SECTION 1: Identification**

### 1.1. Identification

Product form : Mixture

Product name : Silver Plating Pen PL-1018
Other means of identification : PL-1018 Plating Pen

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

Hunter Products, Inc 36 Madison Avenue Flemington, NJ 08822 T 908-526-8440

#### 1.4. Emergency telephone number

Emergency number : 001 908 581 1499

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Skin corrosion/irritation Category 1

Serious eye damage/eye irritation Category 1

Causes severe skin burns and eye damage

Causes serious eye damage

### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : Causes severe skin burns and eye damage

Causes serious eye damage

Precautionary statements (GHS US) : Do not breathe mist, vapors, spray.

Wash hands, forearms and face thoroughly after handling. Wear protective clothing, eye protection, face protection. If swallowed: rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If inhaled: Remove person to fresh air and keep 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 doctor, a POISON CENTER. Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container to an approved waste disposal plant.

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

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### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%
Diammonium hydrogen 2-hydroxypropane-1,2,3-tricarboxylate	CAS-No.: 3012-65-5	15 – 20
Potassium dicyanoargentate	CAS-No.: 506-61-6	1 – 5

The specific chemical\ component identities and/or the exact component percentages of this material may be withheld as trade secrets.

This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

#### **SECTION 4: First-aid measures**

### 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a

physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### **SECTION 5: Fire-fighting measures**

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe mist, spray, vapors.

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#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe

mist, spray, vapors. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### Silver Plating Pen PL-1018

No additional information available

### Potassium dicyanoargentate (506-61-6)

No additional information available

#### Diammonium hydrogen 2-hydroxypropane-1,2,3-tricarboxylate (3012-65-5)

No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

### Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

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### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### Personal protective equipment symbol(s):







### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Device containing liquid.

Color : Colorless

Odor : Mixture contains one or more component(s) which have the following odour:

Not classified.

: Not oxidising.

Odor threshold No data available рΗ No data available Melting point Lesser than water No data available Freezing point Boiling point Greater than water Flash point No data available Relative evaporation rate (butyl acetate=1) No data available Flammability Not applicable. : No data available Vapor pressure Relative vapor density at 20°C : No data available Relative density : No data available Solubility Soluble in water. Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : No data available Decomposition temperature No data available Viscosity, kinematic No data available Viscosity, dynamic No data available **Explosion limits** No data available

### 9.2. Other information

Explosive properties

Oxidizing properties

No additional information available

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

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### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Causes severe skin burns.
Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified

Potassium	dicyanoargent	ate (506-61-6)
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N	IOAEL (oral,rat,90 days)	10 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose
		Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: EU
		Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Potassium dicyanoargentate (506-61-6)	
LC50 - Fish [1]	3.3 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	0.022 mg/l Test organisms (species): Daphnia magna

#### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

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### **SECTION 13: Disposal considerations**

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

### **SECTION 14: Transport information**

In accordance with DOT / IMDG / IATA

#### 14.1. UN number

DOT NA No : UN3547 UN-No. (IMDG) : 3547 UN-No. (IATA) : 3547

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Articles containing corrosive substance, n.o.s. (CONTAINS : Potassium dicyanoargentate)
Proper Shipping Name (IMDG) : ARTICLES CONTAINING CORROSIVE SUBSTANCE, N.O.S. (CONTAINS : Potassium

dicyanoargentate)

Proper Shipping Name (IATA) : Articles containing corrosive substance, n.o.s. (CONTAINS : Potassium dicyanoargentate)

### 14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 8

IMDG

Transport hazard class(es) (IMDG) : 8
Hazard labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8

#### 14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

DOT

UN-No.(DOT) : UN3547

DOT Special Provisions (49 CFR 172.102) : 391 - Except for articles being transported by motor vehicle as a material of trade in accordance

with 173.6 of this subchapter, articles containing hazardous materials of Division 2.3, or Division 4.2, or Division 4.3, or Division 5.1, or Division 5.2, or Division 6.1 (substances with an inhalation toxicity of Packing Group I) and articles containing more than one of the following hazards: (1) Gases of Class 2; (2) Liquid desensitized explosives of Class 3; or (3) Self-reactive substances and solid desensitized explosives of Division 4.1, may only be offered for transportation and

transported under conditions approved by the Associate Administrator.

DOT Packaging Non Bulk (49 CFR 173.xxx) : 232 DOT Packaging Bulk (49 CFR 173.xxx) : 232

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DOT Quantity Limitations Passenger aircraft/rail (49 : Forbidden

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

: Forbidden

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a **DOT Vessel Stowage Location** 

> passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

**IMDG** 

Special provision (IMDG) : 274, 391 Limited quantities (IMDG) 0 : E0 Excepted quantities (IMDG) Packing instructions (IMDG) P006, LP03

EmS-No. (Fire)

: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES EmS-No. (Spillage)

Stowage category (IMDG) : B

Properties and observations (IMDG) Causes burns to skin, eyes and mucous membranes.

IATA

PCA Limited quantities (IATA) : Forbidden PCA limited quantity max net quantity (IATA) : Forbidden PCA packing instructions (IATA) Forbidden PCA max net quantity (IATA) Forbidden CAO packing instructions (IATA) Forbidden CAO max net quantity (IATA) Forbidden Special provision (IATA) ERG code (IATA) 8L

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Potassium dicyanoargentate (506-61-6)	
CERCLA RQ	1 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

Diammonium hydrogen 2-hydroxypropane-1,2,3-tricarboxylate (3012-65-5)	
CERCLA RQ	5000 lb

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#### 15.2. International regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Potassium dicyanoargentate(506-61-6)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List
Diammonium hydrogen 2-hydroxypropane-1,2,3-tricarboxylate(3012-65-5)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List

### **SECTION 16: Other information**

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ICSDS\_SDS\_USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.