




SDS – Silver Heavy Plating Pen PL- 1018

1. Product and Company Identification

Product Name	Silver Plating Pen PL-1018
Other Product Name(s)	PL-1018 Plating Pen
Product Use	Silver electroplating
Manufacturer	Hunter Products, Inc. 36 Madison Ave. Flemington NJ 08822 908-526-8440
Emergency Telephone Number	908-230-0800

2. Hazards Identification

Emergency Overview: Black pen-like dispenser of compound containing silver used for electroplating. Compound is toxic and a skin and eye irritant.

OSHA Regulatory Status	Hazardous
OSHA Classification	Oral toxicity: Cat 4 Dermal toxicity: Cat 4 Skin corrosion/irritation: 2 Eye damage/irritation: Cat 2a Specific Target Organ Toxicity – Single Exposure. Cat 3
OSHA Signal Word	WARNING
OSHA Hazard Statements	Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation (during use).
OSHA Precautionary Statements	Wear glasses or goggles and protective gloves (while handling). Do not breathe fumes or vapors (during use). Do not get in eyes, on skin or on clothing. Do not swallow. Wash thoroughly after handling. 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. If on skin, wash with water. Call a physician if you feel unwell. For Respiratory Irritation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
OSHA Label Symbols	
Other Hazards Not Specified by OSHA	None

20% of product consists of ingredients with unknown oral toxicity.

Potential Health Effects:

Skin	Causes irritation. Harmful in contact with skin.
Eyes	Causes irritation
Ingestions	Harmful if swallowed.
Inhalation	Vapors may cause irritation (created during use).

Chronic Effects	None anticipated
------------------------	------------------

Ingredients found on established carcinogen lists:

Ingredient	NTP Status	IARC Statue	OSHA List
No ingredients listed	---	---	---

3. Composition / Information on Ingredients

Chemical Name	CAS #	EC Number	Wt. %*
Silver potassium cyanide (Acute toxicity: oral 2& dermal 2 ;)	506-61-6	221-146-3	1 – 5
Ammonium citrate dibasic (Eye irritant 2, STOT-SE 3)	3012-65-5	221-146-3	15 – 20
Water (not hazardous)	7732-18-5	231-791-2	65 - 80

4. First Aid Measures

Skin	If on skin wash with plenty of water. If skin irritation occurs or if you feel unwell: Get medical advice/attention.
Eyes	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.
Ingestions	Contact a poison control center.
Inhalation	Remove to fresh air.
Advice to Physician	Treat symptomatically.

5. Fire Fighting Measures

Extinguishing Media:	Use any medial suitable for surrounding fire.
Fire/Explosion Hazards:	None noted
Fire Fighting Procedures:	Wear normal turn-out gear. Avoid contact with skin and eyes. Wear self-contained respiratory protection.
Flammable Limits:	None
Flash Point	None
Auto ignition Temperature:	Not determined
Hazardous Combustion Products:	Toxic inorganic and organic compounds and metal (silver) fumes.

6. Accidental Release Measures

Personal Precautions:	Wear proper personal protective equipment indicated in Section 8.
Containment:	Pick up pen(s).from ground or other surface
Clean Up:	Discharge of contents highly unlikely. In case of liquid spill, use absorbent like clay or kitty litter and place in container for disposal.
Notification Requirements:	None noted

7. Handling and Storage

Handling:	Wear proper personal protective equipment indicated in Section 8. Wash hands before eating or drinking.
Storage:	Should be stored in a dry location. Keep packages tightly closed to minimize product contamination. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Engineering Controls:	Appropriate ventilation for removal of all electroplating vapors should be used.
------------------------------	--

Personal Protective Equipment:

Eyes and Face:	Wear safety glasses or chemical goggles to avoid accidental eye contact.
Respiratory:	Point ventilation to remove all electroplating vapors and fumes should be used.
Hands, Arms, and Body:	Use work gloves and aprons suitable for electroplating operations.
Other	Safety shower and an eyewash (or source of running water) should be available for emergency exposures.

Exposure Guidelines:

Ingredient	ACGIH TLW	ACGIH STEL	OSHA PEL	OSHA STEL
Silver potassium cyanide (as silver)	0.01 mg/m ³	---	0.01 mg/m ³	---
Cyanides (as CN)	---	---	5 mg/m ³ skin	

9. Physical and Chemical Properties

Appearance & Physical State	Black pen-like device containing liquid ingredient
Odor:	None
Odor Threshold:	None
pH	Not applicable
Specific Gravity (Relative density):	Approximately 1
Initial Boiling Point & Range:	Greater than water
Melting Point /Freezing Point:	Less than water
Evaporation Rate:	Not determined
Percent Volatile:	Not determine
Solubility in Water	Completely soluble
Vapor Density:	Not determined
Vapor Pressure:	Not determined
Upper/ Lower Flammable Limits:	None
Flash Point	None
Auto ignition Temperature:	Not determined
Flammability (solid, gas)	Not applicable
Octanol/water partition coefficient	Not determined
Decomposition temperature	Not determined
Viscosity	Not determined

10. Stability and Reactivity

Stability:	Stable product
Conditions to Avoid:	None anticipated

Materials to avoid	None anticipated.
Hazardous Polymerization:	Will not occur
Hazardous Decomposition Products	Silver fume, toxic cyanide vapors, NOx.

11. Toxicological Information

Eye:	Causes eye irritation.
Skin:	Causes skin irritation.
Oral:	Estimated >702 mg/kg (oral, rat) Harmful due to small cyanide content.
Inhalation:	Processing vapors may cause irritation.
Chronic:	No effects anticipated.

12. Ecological Information

Acute ecotoxicity:	Not determined
Chronic ecotoxicity	Not determined
Other information	None

13. Disposal Considerations

RCRA Status	Not a hazardous waste if discarded
Disposal Method:	Conform to Federal, State and Local regulations.

14. Transportation Considerations

DOT Proper Shipping Name:	Not regulated for transport
DOT Primary Hazard Class	Not applicable
DOT UN / NA Number:	Not applicable
DOT Packing Group	Not applicable
TDG (Canada)	Not regulated for transport
IMDG (International water)	Not regulated for transport
ICAO (Air transport)	Not regulated for transport

15. Regulatory Information

UNITED STATES:

Toxic Substances Control Act (TSCA)

TSCA Inventory Status:	Listed on TSCA Chemical Inventory
Other TSCA Issues:	None

SARA Title III/CERCLA

Ingredients with "Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs).

Ingredient	SARA/CERCLA RQ (lb.)	SARA EHS TPQ (lb.)
Ammonium citrate dibasic	5000	---

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee.

SARA 311 Hazard Class:	Immediate
-------------------------------	-----------

SARA 313 Toxic Chemicals:

The following ingredients are SARA 313 "Toxic Chemicals" and may be subject to annual reporting requirements. CAS numbers and weight percent are found in Section 2.

Ingredient	Comment
Silver potassium cyanide	Must be reported annually (EPCRA regulations)

State Right-To-Know

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

Ingredient	Weight %	Comment
No ingredients listed	----	----

Additional Regulatory Information:	None
---	------

16. Other Information

- Keep out of the reach of children.

Issue Date:	November 21, 2015
Previous Issue Date:	January 10, 2008
Changes from previous version:	Revision of format to meet HCS 2012.

National Fire Protection Assoc. (NFPA) Classification:

4 = Severe; 3 = Serious; 2 = Moderate; 1 = Slight, 0 = Minimal
 Health 2 Flammability 0 Reactivity 0

Hazardous Materials Information Systems (HMIS):

4 = Extreme; 3 = High; 2 = Moderate; 1 = Slight; 0 = Insignificant
 Health 2 Flammability 0 Physical Hazard 0