

1. Product and Company Identification Product Name 24K Gold Plating Pen PL-1003 Other Product Name(s) PL-1003 Plating Pen Product Use Gold electroplating Manufacturer Hunter Products, Inc. 36 Madison Ave Flemington NJ 08822 908-526-8440 908-230-0800

2. Hazards Identification

Emergency Overview: Black pen-like dispenser of compound containing gold used for electroplating. Compound is an eye irritant and harmful if swallowed.

OSHA Regulatory Status	Hazardous	
OSHA Classification	Eye damage/irritation: Cat 2a Specific Target Organ Toxicity – Single Exposure. Cat 3	
OSHA Signal Word	WARNING	
OSHA Hazard Statements	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 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. 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	

23% of product consists of ingredients with unknown oral toxicity.

Potential Health Effects:

Skin	May irritate some individuals.	
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. %*
Gold potassium cyanide		13967-50-5	237-748-4	1 – 2
(Acute toxicity: oral 1 & dermal 2;	Aquatic acute 1, chronic 1)			
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	77

4. First Aid Measures

Skin	If on skin wash with plenty of water. If skin irritation occurs: 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 (gold) 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	None noted		
Requirements:			

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

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:

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Ingredient	ACGIH TLW	ACGIH STEL	OSHA PEL	OSHA STEL
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
рН	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

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Stability:	Stable product	
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Conditions to Avoid:	None anticipated	
Materials to avoid	None anticipated.	
Hazardous Polymerization:	Will not occur	
Hazardous Decomposition	ardous Decomposition Gold fume, toxic cyanide vapors, NOx.	
Products		

11. Toxicological Information

Eye:	Causes eye irritation.		
Skin:	May cause irritation to sensitive individual		
Oral:	Estimated > 2000 mg/kg (oral, rat) May be harmful due to small cyanide content.		
Inhalation:	Processing vapors may cause irritation.		
Chronic:	No effects anticipated.		

12. Ecological Information

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

13. Disposal Considerations

RCRA Status	Not a hazardous waste if discarded		
Disposal Method:	Conform with 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:

<u>Ioxic Substances Control Act (ISCA)</u>			
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 (Ib.)	
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 percents are found in Section 2.

Ingredient	Comment
Gold 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
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16. Other Information

• Keep out of the reach of children.

Issue Date:	August 22, 2018		
Previous Issue Date:	June 9, 2015		
Changes from previous v	ersion: Revisions to exposure values (section 8) and RQs (section15)		

National Fire Protection Assoc. (NFPA) Classification:

4 = Sev	ere; 3	3 = Serious; 2 = N	lode	rate; 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