SDS – Nickel Plating Pen PL-1006

1. Product and Company Identification

Product Name	Nickel Plating Pen PL-1006
Other Product Name(s)	PL-1006 Plating Pen
Product Use	Nickel electroplating
Manufacturer	Hunter Products, Inc. 36 Madison Avenue Flemington, NJ 08822 908-526-8440
Emergency Telephone Number	908-230-0800

2. Hazards Identification

Emergency Overview:	Black pen-like dispenser of compound containing nickel compound used for electroplating. Can cause skin and eye burns and respiratory allergic reactions and vapors are harmful causing several serious health effects

OSHA Regulatory Status	Hazardous
OSHA Classification	Acute Toxicity, Oral: 3 Skin Corrosion/Irritation: 1B Eye Damage/Irritation 1 Respiratory Sensitization 1 Dermal Sensitization 1 Carcinogenicity 1A Reproductive Toxicity 1B STOT RE 1
OSHA Signal Word	DANGER
OSHA Hazard Statements	Causes severe skin burns and eye damage. May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause cancer if vapors are inhaled. May damage fertility or the unborn child. May damage internal organs through long or repeated exposure.
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. IIf swallowed, call a physician or Poison Control Center. Do not induce vomiting. 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 plenty of water. If skin irritation, burns or rash occurs: Get medical advice/attention.For Respiratory Irritation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If exposed or concerned: Get medical advice or attention.
OSHA Label Symbols	
Other Hazards Not	Aquatic Toxicity Acute 1

Specified by OSHA	Aquatic Toxicity Chronic 1

35% of product consists of ingredients with unknown oral toxicity.

Potential Health Effects:

Skin	Causes irritation and may cause burn in the absence of prompt first aid. Nickel may cause allergic skin reaction
Eyes	Causes irritation and possible permanent damage.
Ingestions	Harmful if swallowed.
Inhalation	Vapors may cause irritation (created during use). May cause allergic reaction.
Chronic Effects	Nickel is a respiratory carcinogen. Long term exposure may cause organ damage and reduced fertility.

Ingredients found on established carcinogen lists:

Ingredient	NTP Status	IARC Statue	OSHA List
Nickel sulfamate (Nickel content)	Known carcinogen	1	---

3. Composition / Information on Ingredients

Chemical Name	CAS #	EC Number	Wt. %*
Nickel sulfamate (Skin sens 1, Resp. sens 1, Carcin 1A, Repro 1B. STPT RE 1. Aqua Tox Acute 1, Aqua Tox Chronic 1)	13770-89-3	237-396-1	30 – 40
Zinc pyrophosphate (Aqua Tox Acute 1, Aqua Tox Chronic 1)	7446-26-6	231-203-4	1 – 5
Ammonium hydroxide (Skin corrosion 1B)	1336-21-6	215-647-6	10 – 20
Citric acid (Eye damage/irritation) 2	77-92-2	201-069-1	10 – 20
Water (not hazardous)	7732-18-5	231-791-2	25 – 40

* Exact percentages are trase secret.

4. First Aid Measures

Skin	If on skin wash with plenty of water. If skin irritation, burns or allergic reactions occurs: Get medical advice/attention.
Eyes	If in eyes: Rinse cautiously with water for up to 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor for burns or irritation.
Ingestions	Contact a poison control center. Irritation or other symptoms may occur.
Inhalation	Remove to fresh air. Consult physician relative to any concern about cancer or fertility.
Advice to Physician	Treat symptomatically.

5. Fire Fighting Measures

Extinguishing Media:	Use any agent suitable for surrounding fire (but do not allow runoff to enter sewers or natural waterway.)
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 (nickel, zinc) 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 for this item size. (Also see section 15.)

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. Follow all recommended exposure guidelines found below.

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
Nickel sulfamate (as nickel)	0.1 mg/m^3 TWA Inhalable	---	1 mg/m^3 TWA	---

9. Physical and Chemical Properties

Appearance & Physical State	Black pen-like device containing colorless liquid ingredient
Odor:	None
Odor Threshold:	None
pH	Not determined
Specific Gravity (Relative density):	Not determined for liquid
Initial Boiling Point & Range:	~ 212°F (100°C)
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	Can react with strong oxidizers.
Hazardous Polymerization:	Will not occur
Hazardous Decomposition Products	Toxic nickel, zinc and sulfur oxide fumes

11. Toxicological Information

Eye:	Causes eye irritation and/or corrosive burns
Skin:	May cause irritation, corrosive burns and allergic reactions
Oral:	Calculated: 1616 mg/kg (oral, rat) May be harmful due to nickel compound content.
Inhalation:	Processing vapors may cause irritation and may cause allergic reactions which can be severe.
Chronic:	Nickel is a respiratory carcinogen and may affect fertility and internal organs with prolonged and repeated exposure.

12. Ecological Information

Acute ecotoxity:	Highly toxic to aquatic species
Chronic ecotoxicity	Highly toxic to aquatic species
Other information	May persist in the environment

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:

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.)
Formal RQ for nickel compounds not established	---	---
Ammonium Hydroxide	1000	---

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, delayed

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
Nickel sulfamate (nickel compounds)	Must be reported annually (EPCRA regulations)
Zinc pyrophosphate (zinc compouds)	Must be reported annually (EPCRA regulations)
Ammonium Hydroxide	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
Nickel sulfamate	< 40%	California Proposition 65 carcinogen

Additional Regulatory Information:	None

16. Other Information

- Keep out of the reach of children.

Issue Date:	August 12, 2015
Previous Issue Date:	January 1, 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 3 Flammability 0 Reactivity 0

Hazardous Materials Information Systems (HMIS):

4 = Extreme; 3 = High; 2 = Moderate; 1 = Slight; 0 = Insignificant

Health 3* Flammability 0 Physical Hazard 0 * = Chronic health risk