

Material Safety Data Sheet May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.		U.S. Department of Labor Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072			
IDENTITY (As Used on Label and List) Heavy Copper (Rapid) Plating Pen PL-1019		<i>Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.</i>			
Section I					
Manufacturer's Name Hunter Products, Inc.		Emergency Telephone Number (908) 526-8440			
Address (Number, Street, City, State, and Zip Code) 792 Partridge Drive, P.O. Box 6795		Telephone Number for Information (908) 526-8440			
Bridgewater, NJ 08807		Date Prepared 01/02/11			
		Signature of Preparer (optional)			
Section II – Hazardous Ingredients/Identity Information					
Hazardous Components (Specific Chemical Identity: Common Name(s))		OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Cupric Pyrophosphate					19.8%
Ammonia Water					29.7%
Citric Acid					26.8%
Aqua Pura (H ₂ O)					23.7%
Cupric Pyrophosphate CAS # 10102-90-6					
Ammonia Water CAS# 1336-21-6					
Citric Acid CAS# 77-92-9					
Section III – Physical/Chemical Characteristics					
Boiling Point		≈ 212°F (100°C)	Specific Gravity (H ₂ O = 1)		1.50
Vapor Pressure (mm Hg.)		N.A.	Melting Point		N.A.
Vapor Density (AIR = 1)		N.A.	Evaporation Rate (Butyl Acetate = 1)		N.A.
Solubility in Water		Complete			
Appearance and Odor		Blue, odorless solution			
Section IV – Fire and Explosion Hazard Data					
Flash Point (Method Used)		Flammable Limits		LEL	UEL
N.A.		N.A.		N.A.	N.A.
Extinguishing Media		N.A.			
Special Fire Fighting Procedures		N.A.			
Unusual Fire and Explosion Hazards		None			
(Reproduce locally)				OSHA 174, Sept. 1985	

Section V – Reactivity Data			
Stability	Unstable		Conditions to Avoid N.A.
	Stable	X	N.A.
Incompatibility (<i>Materials to Avoid</i>) N.A.			
Hazardous Decomposition or Byproducts N.A.			
Hazardous Polymerization	May Occur	N.A.	Conditions to Avoid N.A.
	Will Not Occur	N.A.	N.A.
Section VI – Health Hazard Data			
Route(s) of Entry:	Inhalation? X	Skin? X	Ingestion? X
Health Hazards (<i>Acute and Chronic</i>) N.A.			
Carcinogenicity:	NTP? N.A.	IARC Monographs? N.A.	OSHA Regulated? N.A.
Signs and Symptoms of Exposure N.A.			
Medical Conditions Generally Aggravated by Exposure N.A.			
Emergency and First Aid Procedures For skin contact, wash with soap and water. For eye contact, flush thoroughly with water. If ingested, dilute with 3-4 glasses of water or milk.			
Section VII – Precautions for Safe Handling and Use			
Steps to Be Taken in Case Material is Released or Spilled Use standard clean-up procedures with water. In cases where clothes are stained with a solution, please wash them immediately.			
Waste Disposal Method Dispose in accordance with local regulations.			
Precautions to Be Taken in Handling and Storing Store in cool, dry location. Avoid accidental ingestion or skin contact.			
Other Precautions Please keep children off the plating equipment.			
Section VIII – Control Measures			
Respiratory Protection (<i>Specify Type</i>) N.A.			
Ventilation Moderate ventilation.	Local Exhaust N.A.	Special N.A.	
	Mechanical (<i>General</i>) Moderate ventilation.	Other N.A.	
Protective Gloves Optional	Eye Protection Optional		
Other Protective Clothing or Equipment N.A.			
Work/Hygienic Practices Wash hands after use and before eating or smoking.			