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

Causes serious eye irritation

May cause an allergic skin reaction

May damage fertility or the unborn child

May cause cancer (Inhalation)

difficulties if inhaled

exposure

May cause an allergy or asthma symptoms or breathing

Causes damage to organs through prolonged or repeated

Suspected of causing genetic defects (Inhalation)

SECTION 1: Identification

1.1. Identification

Product form Product name : Mixture

: Chrome Color Plating Pen PL-1009

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

Serious eye damage/eye irritation Category 2 Respiratory sensitization, Category 1

Skin sensitization, Category 1 Germ cell mutagenicity Category 2 Carcinogenicity Category 1A Reproductive toxicity Category 1B Specific target organ toxicity (repeated exposure) Category 1

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)	: Danger
Hazard statements (GHS US)	: May cause an allergic skin reaction
	Causes serious eye irritation
	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
	Suspected of causing genetic defects (Inhalation)
	May cause cancer (Inhalation)
	May damage fertility or the unborn child
	Causes damage to organs through prolonged or repeated exposure
Precautionary statements (GHS US)	: Obtain special instructions before use.
	Do not handle until all safety precautions have been read and understood.
	Do not breathe dust/fume/gas/mist/vapors/spray.
	Avoid breathing dust/fume/gas/mist/vapors/spray.
	Wash hands, forearms and face thoroughly after handling.
	Do not eat, drink or smoke when using this product.
	Contaminated work clothing must not be allowed out of the workplace.

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Wear protective gloves/protective clothing/eye protection/face protection.

[In case of inadequate ventilation] wear respiratory protection.

If on skin: Wash with plenty of water.

If inhaled: If breathing is difficult, 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.

If exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Specific treatment (see supplemental first aid instruction on this label).

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center or doctor.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Cobalt sulphate	CAS-No.: 10124-43-3	21
citric acid	CAS-No.: 77-92-9	15.5
nickel bis(sulfamidate); nickel sulfamate	CAS-No.: 13770-89-3	9

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	: IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	 Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

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

Symptoms/effects after inhalation	:	May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	:	May cause an allergic skin reaction.
Symptoms/effects after eye contact	:	Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing	g media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Specific hazards arising from the chem	nical	
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Special protective equipment and prec	autions 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 measur	res	
6.1. Personal precautions, protective equip	oment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe mist, spray, vapors.	
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. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe mist, spray, vapors. Avoid contact with skin and eyes.

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Hygiene measures	: Separate working clothes from town clothes. Launder separately. Contaminated work clothing should not be allowed out of the workplace. 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

Chrome Color Plating Pen PL-1009	
lo additional information available	
cobalt sulphate (10124-43-3)	
lo additional information available	
ickel bis(sulfamidate); nickel sulfamate (13770-89-3)	
No additional information available	
itric acid (77-92-9)	
lo additional information available	

8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls Ensure good ventilation of the work station.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	
Respiratory protection:	
[In case of inadequate ventilation] wear respiratory protection.	

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Appearance
Color

- : Liquid
- : Device containing liquid.
- : Colorless

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Odor Odor threshold pH Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability Vapor pressure Relative vapor density at 20°C Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature	 odorless No data available No data available Not applicable No data available ≈ 212 °F No data available No data available Not applicable. No data available No data available No data available No data available Soluble in water. No data available
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o	
Viscosity, kinematic	: No data available
Viscosity, dynamic Explosion limits	: No data available : No data available
Explosive properties Oxidizing properties	: Not classified. : Not oxidising.

9.2. Other information

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).

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

Cobalt sulphate (10124-43-3)

LD50 oral rat	1330 mg/kg OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

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Cobalt sulphate (10124-43-3)	
ATE US (oral)	1330 mg/kg body weight
nickel bis(sulfamidate); nickel sulfamate (13	
LD50 oral rat	1098 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), 95% CL: 500 - 2000
ATE US (oral)	1098 mg/kg body weight
ATE US (dust, mist)	1.5 mg/l/4h
citric acid (77-92-9)	
LD50 oral rat	3000 mg/kg Source: OECD Screening Information Data Set
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity	 Not classified Causes serious eye irritation. May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Suspected of causing genetic defects (Inhalation).
Carcinogenicity	: May cause cancer (Inhalation).
Cobalt sulphate (10124-43-3)	
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
Reproductive toxicity STOT-single exposure	: May damage fertility or the unborn child. : Not classified
citric acid (77-92-9)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
Cobalt sulphate (10124-43-3)	
LOAEC (inhalation,rat,dust/mist/fume,90 days)	0.31 mg/l air Animal: rat
NOAEL (oral,rat,90 days)	3 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
nickel bis(sulfamidate); nickel sulfamate (1	3770-89-3)
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
citric acid (77-92-9)	
LOAEL (oral,rat,90 days)	8000 mg/kg body weight Animal: rat
NOAEL (oral,rat,90 days)	4000 mg/kg body weight Animal: rat
Aspiration hazard Viscosity, kinematic Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact	 Not classified No data available May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

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Cobalt sulphate (10124-43-3)	
LC50 - Fish [1]	85.3 mg/l Danio rerio
EC50 - Crustacea [1]	5.89 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	0.2 mg/l OECD Guideline 201 (Alga, Growth Inhibition Test)
NOEC (chronic)	0.04 mg/l
citric acid (77-92-9)	
LC50 - Fish [1]	48 mg/l Source: ECOTOX
EC50 - Other aquatic organisms [1]	> 50 mg/l Test organisms (species): other aquatic crustacea:

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

citric acid (77-92-9)	
Partition coefficient n-octanol/water (Log Pow)	-1.7 Source: ICSC

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

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

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)		Not applicable Not applicable Not applicable
14.3. Transport hazard class(es)		
DOT Transport hazard class(es) (DOT)	:	Not applicable
IMDG Transport hazard class(es) (IMDG)	:	Not applicable

ΙΑΤΑ

Transport hazard class(es) (IATA)	: Not applicable
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14.4. Packing group

Packing group (DOT)	
Packing group (IMDG)	
Packing group (IATA)	

14.5. Environmental hazards

Other information

: No supplementary information available.

Not applicableNot applicableNot applicable

14.6. Special precautions for user

DOT

No data available

IMDG

No data available

IATA

No data available

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.

15.2. International regulations

Cobalt sulphate (10124-43-3)

Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

This product can expose you to Cobalt sulfate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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.