

SECTION 1: Identification**1.1. Identification**

Product form : Mixtures
Product name : Electroless Copper Part A
Product code : PRINSTA-P10003

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: For laboratory and manufacturing use only.

Restrictions on use: Not for food, drug or household use

1.3. Details of the supplier of the safety data sheet

Prinsta Inc
19 Morris Ave – NewLab BLDG 128
Brooklyn, NY 11205
USA T 917-719-0102

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

Article I. SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS-US****classification**

Acute toxicity, oral (chapter 3.1), Cat. 3

Skin corrosion/irritation (chapter 3.2), Cat. 2

Eye damage/irritation (chapter 3.3), Cat. 2A

Aquatic Toxicity (Acute), Cat. 1

Aquatic Toxicity (Chronic), Cat 1

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2.2. Label elements

Pictogram



Signal Word

Danger

Hazard Statements

H301: Toxic if swallowed.
H315: Causes skin irritation.
H319: Causes eye irritation.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P264 Wash (location/object) thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/ face protection.

Response Statements

P301+P310 IF SWALLOWED: Call a POISON CENTER/DOCTOR if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P332+P313 Dispose of contents/container to qualified person.
If skin irritation occurs: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and continue rinsing.

P337+P313 If eye irritation persists: Get medical attention/advice.

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2.3. Other hazards

Adverse Human Health Causes serious eye irritation.

Effects and symptoms

Causes skin irritation.
Material may be irritating to the mucous membranes and upper respiratory tract.
May be harmful by inhalation or skin absorption.
May cause respiratory system irritation.
Toxic if swallowed.
Very toxic to aquatic life with long lasting effects.
To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

2.4. Unknown acute toxicity (GHS US)

Not applicable

Article II. SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS-US classification |
|---------------------|--------------------|-------|------------------------------------------------------------------------------------------------------------------|
| Water | (CAS No) 7732-18-5 | 75-90 | Not classified |
| Copper (II) sulfate | (CAS No) 7758-99-8 | 10-25 | Acute Tox. (O) 3: H301 Skin Corr. 2: H315 Eye Damage 2: H319 Aquatic (A) 1: H400 Aquatic (C) 1: H410 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

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| | |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First-aid measures general | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). May be mildly irritation to eyes, throat and skin if directly exposed. |
| First-aid measures after inhalation | : Allow victim to breathe fresh air. Allow the victim to rest. If not breathing, give artificial respiration. |
| First-aid measures after skin contact | : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. |
| First-aid measures after eye contact | : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. |
| First-aid measures after ingestion | : Rinse mouth. Drink 1 or 2 glasses of water. Do NOT induce vomiting. Obtain emergency medical attention if symptoms occur. |

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Media: Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing: A solid water stream may be inefficient.

Media:

5.2. Special hazards arising from the substance or mixture

| | |
|------------------------------------------|----------------|
| Flammable properties and Hazards: | Not available. |
| Hazards: | Not available. |
| Flash Pt: | Not available. |
| Explosive Limits: | Not available. |
| Autoignition Pt: | Not available. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses, rubber gloves and rubber apron.

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Emergency procedures : Evacuate unnecessary personnel. Use caution during clean-up; avoid stepping into spilled solid or clean-up procedures that generate substantial amounts of dust.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Transfer to a chemical waste container for disposal in accordance with local regulations.

Article III. SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapor. Avoid contact with skin or eyes. Remove contaminated clothing promptly. Clean up spilled product immediately. Keep out of reach of children.

Hygiene measures : Do not eat, drink, smoke, or apply cosmetics when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Ensure all containers are correctly labeled. Store containers away from direct sunlight, sources of intense heat, or where freezing is possible. Empty containers may contain residual material; therefore, empty containers should be handled with care. Material should be stored in secondary containers, or in a diked area, as appropriate. Storage and use areas should be covered with impervious materials. Inspect all.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Water (7732-18-5)

Not applicable

8.2. Exposure controls

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Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Safety showers, eye wash station, and hand-washing equipment should be available.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Safety glasses.



| | |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Skin protection | : Wear protective gloves such as neoprene or nitrile based gloves. Use triple gloves for spill response, as stated in Section 6 (Accidental Release Measures) of this SDS. |
| Eye/Face protection | : Chemical goggles or safety glasses. |
| Respiratory protection | : None needed under normal conditions of use. Use NIOSH approved respirators if ventilation is inadequate to control sprays or mists. For situations in which significant amounts of sprays or mists could be generated, wear an air-purifying respirator with a high-efficiency particulate filter. |
| Body protection | : Use a body protection appropriate to task(e.g., lab coat, coveralls, or apron). Care should be taken to select protection for potentially exposed areas when prolonged exposure could occur in occupational settings. |

Article IV. SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|----------------|----------------------|
| Physical state | : Liquid |
| Appearance | : Faint Blue Liquid. |
| Odor | : No data available |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |

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| | |
|---------------------------------------------|---------------------|
| Relative evaporation rate (butyl acetate=1) | : 1 |
| Flammability (solid, gas) | : No data available |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Specific gravity / density | : No data available |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : Not applicable. |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not reactive under typical conditions of use or handling.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

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This product is not self-reactive or air-reactive.

This product will not undergo hazardous polymerization.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

This product is not compatible with hydroxylamine, magnesium.

10.6. Hazardous Decomposition or Byproducts

Copper Oxides

Sulfur Oxides

Article V. SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Likely routes of exposure | : Skin and eye contact |
| Acute toxicity | : Oral Human TDLO: 272 mg/kg Intraperitoneal Rat LD50: 18700ug/kg Oral Rat LD50: 300 mg/kg Oral Mouse LD50: 43 mg/kg Intraperitoneal Mouse LD50: 20 mg/kg Inhalation Rat LC50: 90 pp7/1hour Oral Rabbit LD50: 27 g/kg |
| Skin corrosion/irritation | : Mild irritation may occur |
| Serious eye damage/irritation | : Mild irritation may occur |
| Respiratory or skin sensitization | : Mild irritation may occur |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified under NTP, IARC Monographs, or OSHA |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity – single exposure | : Not classified |
| Specific target organ toxicity – repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

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Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Article VI. SECTION 12: Ecological information

12.1. Toxicity

Avoid release into the environment.

Runoff from fire control or dilution water may cause pollution.


SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Consult appropriate federal and local regulations for disposal. Empty containers are subject to the same regulations.

SECTION 14: Transport information

14.1. Land Transport (US DOT)

| | |
|---------------------------------|-------------------------------------------------------------------------------------------|
| DOT Proper Shipping Name | : Environmentally hazardous substances, solid, n.o.s. (Copper sulphate pentahydrate) |
| DOT Hazard Class | : 9  |
| UN/NA Number | : UN3077 |
| Packaging Group | : III |

14.1. Land Transport (European ADR/RID)

| | |
|------------------------------|--------------------------------------------------------------------------------------|
| ADR/RID Shipping Name | : Environmentally hazardous substances, solid, n.o.s. (Copper sulphate pentahydrate) |
| Hazard Class | : 9 – CLASS 9 |
| UN Number | : 3077 |
| Packaging Group | : III |
| IATA Classification | : 9 |

14.1. Air Transport (European ICAO/IATA)

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| | |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADR/RID Shipping Name | : Environmentally hazardous substances, solid, n.o.s. (Copper sulphate pentahydrate) |
| Hazard Class | : 9 – CLASS 9 |
| UN Number | : 3077 |
| Packaging Group | : III |
| IATA Classification | : 9 |
| Additional Transport Information | Transport in accordance with local, state, and federal regulations. When sold in quantities of less than or equal to 1mL, or 1g, with an Expected Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity. |

Article VII. SECTION 15: Regulatory information

15.1. US Federal regulations: Safety, health and environmental regulations specific for this product in question

Article VIII. SECTION 16: Other information

Revision date : N/A

Other information : None.

SDS US prinsta

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