

CASWELL INC

Safety Data Sheet Electroless Copper Activator

SECTION 1: Identification

1.1 Product identifier

| | Product name | Electroless Copper Activator |
|-----|---------------------------|--|
| | Product number Brand | ELCUACT Caswell |
| 1.4 | Supplier's details | |
| | Name Address | Caswell Inc 7696 Route 31 Lyons, NY 14489 USA |
| | Telephone Fax email | 315 946 1213 315 946 4456 sales@caswellplating.com |

1.5 Emergency phone number(s)

Office Hours (9-4ET): 315 946 1213 24 Hour: CHEMTEL US# 1-800-255-3924 Intl# +01-813-248-0585

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Acute toxicity, oral (chapter 3.1), Cat. 4
- Skin corrosion/irritation (chapter 3.2), Cat. 3
- Eye damage/irritation (chapter 3.3), Cat. 2B

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s) H302 H316

Harmful if swallowed Causes mild skin irritation

| H320 | Causes eye irritation |
|----------------------------|--|
| Precautionary statement(s) | |
| P264 | Wash thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P301+P312 | IF SWALLOWED: Call a POISON CENTER/doctor//if you feel unwell, |
| P330 | Rinse mouth. |
| P501 | Dispose of contents/container to |
| P332+P313 | 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 easy to do. Continue rinsing. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. WATER

| Concentration | 90 - 98 % |
|---------------|-----------|
| CAS no. | 7732-18-5 |

2. HYDROCHLORIC ACID (<37%)

| Concentration | 1 - 5 % |
|---------------|--------------|
| EC no. | 231-595-7 |
| CAS no. | 7647-01-0 |
| Index no. | 017-002-01-X |

- Skin corrosion/irritation (chapter 3.2), Cat. 1B

- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3

| H314 | Causes severe skin burns and eye damage |
|------|---|
| H335 | May cause respiratory irritation |

| 3. PALLADIUM CHLORIDE | |
|-----------------------|-----------|
| Concentration | 1 - 5 % |
| CAS no. | 7647-10-1 |

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

| General advice | May be mildly irritating to eyes, throat and skin if directly exposed. |
|-------------------------|--|
| If inhaled | If breathed in, move person into fresh air. If not breathing, give artificial respiration. |
| In case of skin contact | Wash off with soap and plenty of water. |

In case of eye contactFlush eyes with water as a precaution.If swallowedDrink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical
attention immediately if symptoms occur.

SECTION 5: Fire-fighting measures

- 5.1 Suitable extinguishing media Any
- 5.2 Specific hazards arising from the chemical None

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personnel who have received basic chemical safety training can generally handle small-scale releases (e.g., under 1 kg). For small releases, the minimum Personal Protective Equipment should be rubber gloves and rubber apron, splash goggles or safety glasses. Use caution during clean-up; avoid stepping into spilled solid or clean-up procedures that generate substantial amounts of dust.

6.2 Environmental precautions

Avoid response actions that can cause a release of a significant amount of the substance (1 liter or more) into the environment.

6.3 Methods and materials for containment and cleaning up Any available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

HYGIENE PRACTICES: Keep out of reach of children. Follow good chemical hygiene practices. Do not smoke, drink, eat, or apply cosmetics in the chemical use area. Avoid inhalation of dusts. Use in wellventilated area. Avoid contact with skin or eyes. Remove contaminated clothing promptly. Clean up spilled product immediately.

7.2 Conditions for safe storage, including any incompatibilities

Ensure all containers are correctly labeled. Store containers away from direct sunlight, sources of intense heat, or where freezing is possible. Store this product away from incompatible chemicals (See Section 10, Stability and Reactivity). 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

1. Hydrogen chloride (CAS: 7647-01-0) PEL (Inhalation): (C) 5 ppm (OSHA) OSHA Annotated Table Z-1, www.osha.gov

2. Hydrogen chloride (CAS: 7647-01-0)

PEL (Inhalation): (C) 7 mg/m3 (OSHA) OSHA Annotated Table Z-1, www.osha.gov

3. Hydrogen chloride (CAS: 7647-01-0) PEL (Inhalation): (C) 5 ppm (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

4. Hydrogen chloride (CAS: 7647-01-0)

REL (Inhalation): (C) 5 ppm (NIOSH) OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

Use this product in well-ventilated environment. Safety showers, eye wash stations, and hand-washing equipment should be available.

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



Eye/face protection

Splash goggles or safety glasses. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, or the European Standard EN166.

Skin protection

Neoprene gloves or nitrile gloves should be used. Use triple gloves for spill response, as stated in Section 6 (Accidental Release Measures) of this SDS. If necessary, refer to U.S. OSHA 29 CFR 1910.138, appropriate Standards of Canada, or appropriate Standards of the European Economic Community.

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.

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.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| Appearance/form (physical state, color, etc.) Odor Odor threshold | Light Brown Liquid Acrid, Pungent |
|---|--------------------------------------|
| pH | <1 |
| Melting point/freezing point | 32 deg F |
| Initial boiling point and boiling range | 102 deg C |
| Flash point | NA |
| Evaporation rate | 1 |

Flammability (solid, gas) Upper/lower flammability limits Upper/lower explosive limits Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Explosive properties Oxidizing properties Not Flammable NA NA 190 mm Hg at 25 deg C 1 1.01 Complete In Water

> 105 deg C

SECTION 10: Stability and reactivity

10.1 Reactivity

Not reactive under typical conditions of use or handling.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

This product is not self-reactive or air-reactive. This product will not undergo hazardous polymerization.

10.5 Incompatible materials

This product is not compatible with strong oxidizers, strong acids and water-reactive substances.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity 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

Carcinogenicity IARC Category 3

SECTION 12: Ecological information

Toxicity None Expected

SECTION 13: Disposal considerations

Disposal of the product

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

SECTION 14: Transport information

DOT (US) Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Toxic Substances Control Act (TSCA) Inventory All components of this product are listed on the TCSA Inventory

Massachusetts Right To Know Components Chemical name: Hydrochloric acid

CAS number: 7647-01-0

New Jersey Right To Know Components Common name: HYDROGEN CHLORIDE CAS number: 7647-01-0

Pennsylvania Right To Know Components Chemical name: Hydrochloric acid CAS number: 7647-01-0

HMIS Rating

| Electroless Copper Activator | |
|------------------------------|---|
| HEALTH | 1 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 0 |
| PERSONAL PROTECTION | В |

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Caswell Inc be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Caswell Inc has been advised of the possibility of such damages.