



Version 1.0

Date: 9/1/2015

SECTION 1. IDENTIFICATION

Product name: PATINA STAIN – Tarnished Copper

Manufacturer's or distributor's details:

Company:

Redeckit, LLC

325 Commerce Blvd.

Liverpool, New York 13088

Phone: 315-641-1916

Toll Free: 1-800-451-9037

Fax: 315-451-2290

E-mail: info@redeckit.com

Website: www.redeckit.com

Emergency telephone number:

Emergency number CHEM-TEL 800-255-3924

Recommended use of the chemical and restrictions on use

Recommended use: Concrete stain

Restrictions on use: This product must not be used in applications other than the above without first seeking the advice of the manufacturer.

SECTION 2. HAZARDS IDENTIFICATION

HYDROCHLORIC ACID

GHS label elements, including precautionary statements:

Signal word: **Danger**

Pictogram(s):



GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Hazard statements

H315 Causes skin irritation

H318 Causes serious eye damage.

Precautionary statements

P280 Wear protective gloves/eye protection/face protection

P305+P351+P338 if in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. The quantities supplied in our products are unlikely to cause severe or immediate health effects.

CUPRIC CHLORIDE

GHS label elements, including precautionary statements:

Signal word: **Danger**

Pictogram(s):



GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Hazard statements

- H290 - May be corrosive to metals
- H302 - Harmful if swallowed
- H312 - Harmful in contact with skin
- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

- P273 – Avoid release to the environment.
- P280 - Wear protective clothing, protective gloves, face protection, eye protection.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Hazardous components

Component	% (w/w)	Exposure Limits
Hydrochloric acid (CAS No.7647-01-0)	2-3	OSHA PEL-TWA 5ppm ceiling ACGIH TLV-TWA 5ppm ceiling
Cupric chloride (CAS No.7447-39-4)	23-26	OSHA PEL-TWA 1 mg/m ³ for copper dusts and mists as Cu ACGIH TLV-TWA 1 mg/m ³ for copper dusts and mists as Cu

HMIS® III (HAZARDOUS MATERIALS INFORMATION SYSTEM) HAZARD INDEX:

HEALTH: 3 - Major injury likely unless prompt action is taken and medical treatment given

FLAMMABILITY: 0 - Will not burn.

PHYSICAL HAZARD: 1 – Normally stable but can become unstable at high temperatures and pressures. May react non-violently with water.

SECTION 4. FIRST-AID MEASURES

Inhalation: Take precautions to ensure your own safety before attempting rescue. Wear appropriate personal protective equipment and use the 'buddy' system. Remove victim to fresh air. If breathing has stopped, begin artificial respiration, or if the heart has stopped, begin cardiopulmonary resuscitation (CPR) immediately. Oxygen should be administered by a trained person. Ensure victim is completely at rest - allow no physical exertion. Symptoms may be delayed for up to 48 hours. Immediately transport victim to an emergency medical facility.

Ingestion: Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or is convulsing. Have victim rinse mouth thoroughly with water. Do not induce vomiting. Have victim drink 300 mL (10 oz.) of water. If milk is available, administer AFTER the water. If vomiting occurs naturally, have the victim lean forward to reduce risk of aspiration. Repeat administration of water. Immediately transport to emergency medical facility.

Skin Contact: Avoid direct contact. Wear impervious protective gloves if necessary. Immediately flush contaminated areas with lukewarm, gently running water for at least 20 minutes. Under running water, remove contaminated clothing, shoes, and leather goods such as watchbands and belts.

Do not interrupt flushing - have emergency vehicle wait if necessary. Transport victim to emergency medical facility. Decontaminate clothing, shoes and leather goods before reuse or discarding.

Eye Contact: Immediately flush contaminated eye(s) with lukewarm, gently running water for at least 30 minutes while holding the eyelid(s) open. Take care not to rinse contaminated water into a non-affected eye. Neutral saline solution may be used for flushing if available. Do not interrupt flushing - keep emergency vehicle **waiting if necessary. If irritation persists, repeat flushing. Transport victim to emergency medical facility.**

General Comments: Provide general supportive measures (comfort, warmth, rest). Seek medical attention for all exposures except minor instances of inhalation or skin contact. First-aid procedures should be reviewed by appropriate personnel familiar with hydrochloric acid and its conditions of use in the workplace.

SECTION 5. FIRE-FIGHTING MEASURES

Flash point: Not Applicable

Auto-ignition temperature: Not applicable. See information under "Fire Fighting Instructions

Lower Explosive Limit: Not established

Upper Explosion Limit: Not established

Sensitivity to Impact: Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

Hazardous Combustion Products: None. See Hazardous Decomposition Products in Section 10, for information on thermal decomposition.

Extinguishing Media: No specific recommendation. Use media to suppress surrounding fire.

Fire Fighting Instructions: Wear adequate personal protective equipment. Use water to keep fire-exposed containers cool to prevent rupture. Use water spray or fog to reduce or direct vapors. Do not direct water at source of leak. Trained personnel may neutralize a spill. Contact with common metals produces hydrogen gas that may form explosive mixtures in air.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection: Evacuate unnecessary personnel from spill area and keep unprotected persons upwind. Wear appropriate personal protective equipment. Ventilate area. Vapour is heavier than air and will collect in low areas. Do not touch spilled hydrochloric acid.

Environmental Precautions: Implement spill control plan. Stop or reduce leak if safe to do so. Prevent from entering sanitary or storm sewers, waterways, or confined spaces. Use inert materials such as earth or sand to form dike.

Remedial Measures: Restrict access to area until completion of cleanup. Ensure cleanup is conducted by trained personnel only. Use all appropriate personal protective equipment. For small spills: absorb with neutralizing materials such as soda ash or lime and collect in sealed containers. Flush area with water. For large spills, contain and collect spilled material if possible. Notify government occupational health and safety and environmental authorities as per applicable regulations. In the United States, releases over 5,000 pounds must be reported to the National Response Center at 1-800-424-8802.

SECTION 7. HANDLING AND STORAGE

Handling Procedures: Prevent release of vapor or mist into workplace air. Ensure adequate ventilation. Have emergency equipment readily available. When diluting, slowly add acid to the water to avoid boiling or splattering. Keep containers closed when not in use. Wash face and hands thoroughly after handling and before eating, drinking, or using tobacco products.

Storage: Store in a cool, dry, well ventilated area, out of direct sunlight and away from heat sources. Store away from incompatible materials such as oxidizing materials, reducing materials, and strong bases. Keep storage area separate from populated work areas.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Use general or local exhaust ventilation to maintain exposure below the exposure limits.

Respiratory Protection: If respiratory protection is required, NIOSH recommends for hydrogen chloride in air:

Up to 50 ppm: Chemical cartridge respirator with hydrogen chloride cartridge(s), powered air-purifying respirator with appropriate cartridge(s), Supplied Air Respirator (SAR), or a full face-piece SCBA.

IDLH Conditions (50 ppm) or Planned Entry in Unknown Concentrations: Positive pressure, full face-piece SCBA, or positive pressure full face-piece SAR with an auxiliary positive pressure SCBA.

Escape: Gas mask with canister, or escape type SCBA.

NOTE: Air purifying respirators do not protect against oxygen deficient atmospheres.

Skin protection: Wear impervious gloves and boots and/or other protective clothing according to circumstances.

Eye and Face Protection: Eye protection is required. Chemical safety goggles are recommended. The wearing of contact lenses is not recommended.

Footwear: As required by worksite rules.

Other: Have a safety shower and eye wash station readily available in the immediate work area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear medium blue-green liquid (Tarnished Copper)

Odor: Acrid odor

Odor Threshold: Not determined

pH: < 1

Vapor Pressure: Not determined

Solubility: Completely soluble in water

Vapor Density: Not determined

Freezing Point: $\approx 0^{\circ}\text{C}$

Boiling Point: 108°C

Critical Temperature: Not applicable.

Relative Density: ≈ 1.18 (water = 1)

Partition Coefficient: No data

Evaporation Rate: Not determined

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable. Avoid heat – releases toxic gases with heat.

Incompatibility: Very corrosive to most metals, producing flammable hydrogen gas. Reacts violently with bases to produce heat. Reacts with reducing agents to produce heat, fire and flammable hydrogen gas. Reacts with oxidizing agents to produce heat. Reacts with carbides, turpentine, phosphorus hydrogen sulphide, organic materials, and alkalis. Contact with explosives may cause detonation. Reacts with cyanides to produce toxic cyanide gas, and sulphides to produce toxic hydrogen sulphide gas.

Hazardous Decomposition Products: Thermal decomposition liberates toxic corrosive fumes of hydrogen chloride, chlorine: manganese, iron and chromium oxides.

Hazardous Polymerization: Will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Exposure: The theoretical LD₅₀ (rat/oral) for Patina Stain is 2260 mg/kg

Chronic Exposure: See Section 3.

Exposure Limits: See Section 2.

Irritancy: See Section 3.

Sensitization: See Section 3.

Carcinogenicity: No data

Teratogenicity: No reports for ingestion or inhalation of copper compounds

Reproductive toxicity: Not available

Mutagenicity: Inconclusive results

Synergistic products: None reported.

SECTION 12. ECOLOGICAL INFORMATION

Environmental toxicity: Copper chloride is a severe marine pollutant.

Biodegradability: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Place used and contaminated material and packagings into suitable containers and dispose of as controlled waste. Review and follow all local, state, and national regulations.

SECTION 14. TRANSPORT INFORMATION

Department of Transport (49 CFR): Corrosive Liquid, Acidic, Inorganic, n.o.s. (contains copper chloride and hydrochloric acid), Class 8, UN 3264, P.G. II, RQ 4.54 kg, or 15 liters of Patina Stain

International Air Transport Association (IATA): Corrosive Liquid, Acidic, Inorganic, n.o.s. (contains copper chloride and hydrochloric acid), Class 8, UN 3264, P.G. II

International Maritime Organization (IMO): Corrosive Liquid, Acidic, Inorganic, n.o.s. (contains copper chloride and hydrochloric acid), Marine Pollutant, Class 8, UN 3264, P.G. II

SECTION 15. REGULATORY INFORMATION

UNITED STATES – FEDERAL REGULATIONS:

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components are listed in the inventory.

OSHA, 29 CFR 1910, Subpart Z: Meets the criteria for a hazardous substance.

CERCLA, 40 CFR 302: RQ, Cupric chloride 4.54 Kg (10 pounds), Hydrochloric Acid, 2270 Kg (5000 pounds)

SARA 302, 40 CFR 355: No ingredients listed

SARA 313, 40 CFR 372: Hydrochloric Acid is subject to the reporting requirements.

SARA 311/312, 40 CFR 370: Immediate (Acute) Health, Delayed (Chronic) Health.

SECTION 16. OTHER INFORMATION

Preparation Date: Sept. 1, 2015

Prepared by: Lou Sorendo, 185 E. Seneca St., Oswego, N.Y. 13126

Comments: This Safety Data Sheet was prepared using information provided by The Sealer Depot. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. The Sealer Depot expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.