SECTION 1: Identification

1.1 Product identifier

Product name Cu-Control

Copper Corrosion Inhibitor

1.3 Recommended use of the chemical and restrictions on use

Water Treatment Application Product

1.4 Supplier's details

Richardson Electronics

Name

Address 40W267 Keslinger Road, P.O. Box 393

Lafox, IL 60147-0393

www.rellaser.com laser@rell.com

Telephone Non-Emergency: (630) 208-2200

1.5 Emergency phone number(s) 800-424-9300 CHEMTREC®

SECTION 2: Hazard identification

General hazard statement

To the best of our knowledge, this Safety Data Sheet is prepared to comply with US OSHA 29 CFR1910.1200 and other governmental agencies both domestic and foreign. Hazard and precautionary statements are based on maximum listed concentrations of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200) and/or other governmental agencies.

2.1 Classification of the substance or mixture

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Acute toxicity, oral, Cat. 4
- Eye damage/irritation, Cat. 2A
- Skin corrosion/irritation, Cat. 2B

2.2 GHS label elements, including precautionary statements

Pictogram



Irritant

Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed H315 Causes skin irritation H320 Causes eye irritation

H413 May cause long lasting harmful effects to aquatic life

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash hand thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Cu-Control

P301+P312 IF SWALLOWED: Call a POISON CENTER /doctor if you feel unwell.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor if you feel unwell.

P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container to licensed contractor

SECTION 3: Composition/information on ingredients

3.2 Product

Components

1. Tolyltriazole 15 - 25 % (Weight)

CAS no. 29385-43-1 EC no. 249-596-6

Other names / synonyms 1H-Benzotriazole, 6(or 7)-methyl-, sodium salt (1:1): TTA 100%: TT 100%

Acute toxicity Oral, Cat. 4 Eye irritation/corrosion, Cat. 2 Reproductive toxicity, Cat. 2 Acute aquatic toxicity, Cat. 2

H302 Harmful fi swallowed

H319 Causes serious eye irritation

H361 Suspected of damaging fertility or unborn child H411 Toxic to aquatic life with long lasting effects

2. Benzotriazole 15 – 25 % (weight)

CAS no. 95-14-7 EC no. 95-14-7

Other names/synonyms 1H-Benzotriazole: 1,2,3-Benzotriazole,

H302 Harmful if swallowed H315 Irritating to skin H319 Irritating to eyes

H412 Harmful to aquatic life with long lasting effects

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

Move out of dangerous area.

If inhaled Remove person to fresh air and keep comfortable for breathing. Call a

poison center or doctor if you feel unwell.

Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing.

In case of skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower

for at least 15 minutes. Call a poison center or doctor if irritation develops or

persists. Wash contaminated clothing before reuse.

Acute and delayed symptoms and effects: Causes skin irritation. Signs/symptoms may include localized redness, swelling, itching.

In case of eye contact Rinse cautiously with water for at least 15 minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. Immediately call a poison center

or doctor.

Cu-Control

Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing.

If swallowed

Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary No data available.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

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

5.2 Specific hazards arising from the chemical

None known other than material can splatter above 100°C/212°F.

5.3 Special protective actions for fire-fighters

Avoid any skin contact. Effects of contact or inhalation may be delayed. Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Wear respiratory protection if necessary. Avoid breathing gas, mist, vapors, or spray. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Stop leak if you can do it without risk. Sweep up and shovel into suitable containers for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not swallow. Avoid breathing mist, vapors, or spray. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Use in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

7.2 Conditions for safe storage, including any incompatibilities

Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Tolyltriazole (1H-Benzotriazole, 6(or 7)-methyl-, sodium salt) (CAS: 29385-43-1)

PEL: None Est. (OSHA) TLV®: None Est. (ACGIH)

2. Benzotriazole (Cas: 95-14-7)

PEL: None Est. (OSHA) TLV®: None Est. (ACGIH)

8.2 Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

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

Pictograms





Eye/face protection

Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Ensure that eyewash stations and/or safety showers are close to the workstation location if working with concentrated product.

Skin protection

Wear protective gloves. Consult manufacturer specifications for further information.

Body protection

Wear protective clothing. Clothing with full length sleeves and pants should be worn. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards

No data available.

Control banding approach

No data available.

Environmental exposure controls

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)

Odor

Odor threshold

рΗ

Melting point/freezing point

Initial boiling point and boiling range

Flash point Evaporation rate

Flammability (solid, gas)

Light amber color liquid

Characteristic Characteristic

<10.00

32°F+/-212°F +/-

No data available.

1.0

Non-flammable

Cu-Control

Upper/lower flammability limits
Upper/lower explosive limits
Vapor pressure

No data available.
No data available.
No data available.

Vapor density 2.1+/Specific Gravity 1.10 +/-

Solubility(ies) Completely soluble in water

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Contact with incompatible materials. Sources of ignition. Exposure to heat.

10.2 Chemical stability

Stable under normal storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, flames, and sparks. Incompatible products. Keep away from open flames, hot surfaces, and sources of ignition.

10.5 Incompatible materials

Avoid contact with Strong Acids, Strong Alkalis, Oxidizers, or any other type of reactive material.

10.6 Hazardous decomposition products

There are no known hazardous decomposition products for this material unless the material is burned in which case undetermined evolution of toxic gases may occur.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Components:

Benzotriazole: LD50 Oral - Female Rat - 560mg/kg Benzotriazole: LD50 Oral - Male Rat - 1,080mg/kg Symptoms (including delayed and immediate effects):

Inhalation: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat,

coughing.

Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Skin corrosion/irritation

Causes skin irritation. Signs/symptoms may include localized redness, swelling, itching.

Benzotriazole: >2000mg/kg

Tolyltriazole: LD50 Skin - Rabbit - >5000mg/kg

Serious eye damage/irritation

Causes serious eye irritation. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing.

Respiratory or skin sensitization

1H-Benzotriazole, 6(or 7)-methyl-, sodium salt (Tolyltriazole): LC50 Inhalation - Rat - 1.75mg/l

Germ cell mutagenicity

No data available.

Cu-Control

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

No data available.

SECTION 12: Ecological information

Toxicity

Components:

Tolyltriazole: LC50 - Oncorhynchus mykiss (rainbow trout) - 21.4mg/l - 96h

Benzotriazole: EC50 - Daphnia magna (water flea) - 35.4mg/l - 48h

Benzotriazole: EC50 - Desmodesmus subspicatus (chodat) - 62mg/l - 72h

Benzotriazole: LC50 - B. Rerio 10mg/l 96h

Persistence and degradability

No data available on product

Bioaccumulative potential

No data available on product

Mobility in soil

No data available.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal of the product

Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Disposal of contaminated packaging

Dispose of as unused product.

Waste treatment

Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable federal, state, and local regulations.

Sewage disposal

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewer.

Other disposal recommendations

Triple rinse the empty containers with water before disposal to reconditioned or land fill or garbage.

SECTION 14: Transport information

DOT (US)

UN Number: NA

Class: NA

Packing Group: NA

Proper Shipping Name: NON-REGULATED MATERIALS

Reportable quantity (RQ): NA

Marine pollutant: No

Poison inhalation hazard: No

IMDG

UN Number:

Class:

Packing Group: EMS Number:

Proper Shipping Name:

IATA

UN Number:

Class:

Packing Group:

Proper Shipping Name:

SECTION 15: Regulatory information

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

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards

Chronic Health Hazard

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA):

This material, as supplied, contain one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) RQ: Not listed

Toxic Substances Control Act (TSCA) Inventory

All components of this product are listed in the U.S. Environmental Protection Agencies, Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

New Jersey Right To Know Components

No components are subject to the New Jersey Right to Know Act.

Pennsylvania Right To Know Components

No components are subject to the Pennsylvania Right to Know Act.

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

HMIS Rating

Cu-Control	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	В

SAFETY DATA SHEET 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 purposes. In no event shall manufacturer 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 manufacturer has been advised of the possibility of such damages.

Date of Preparation/Revision: 5/2022