MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Product Identifier: Other means of identification: Recommended use: Supplier's Name: Address: Phone: Emergency only: Revision Date: Vappro Cu-Tech Corrosion Inhibitor for Copper Copper corrosion protection Magna Chemical Canada Inc. 1450 Government Road West, Kirkland Lake ON P2N 2E9 705 642 3352 or 416 479 9151 Canutec 24hr Tel: 613 996 6666 15 January 2019

SECTION II – HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Flammable Liquid: Category 2

GHS LABEL ELEMENTS SYMBOL(S)



SIGNAL WORDS:

Danger

GHS HAZARDS STATEMENTS:

H225: Highly flammable liquid and vapour

GHS PRECAUTIONARY STATEMENTS:

PREVENTION

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P242: Use only non-sparkling tools.

P243: Take precautionary measures against static discharge.

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

RESPONSE:

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

P370 + P378: In case of fire: Use carbon dioxide, or Dry chemical powder, or water spray for extinction. **STORAGE:**

P403 + P235: Store in a well-ventilated place. Keep cool.

SECTION III – COMPOSITION / INFORMATION ON INGREDIENTS			
Ingredient Name:	<u>Weight %:</u>	TLV	<u>CAS#</u>
Proprietary mixture of amine compound	1-10	N/E	N/E
Denature Alcohol	Balance	1000 ppm	Mixture

SECTION IV – FIRST AID MEASURES

Inhalation

If a person breathes large amounts of this chemical, move the exposed person to fresh air at once. Other measures are usually unnecessary.

Skin Contact

Remove contaminated clothing. Wash affected area with water. If irritation persists, call physician.

Eye Contact

If this chemical contact the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately.

Ingestion

DO NOT INDUCE VOMITING. Get immediate medical attention.

SECTION V – FIRE FIGHTING MEASURES

Suitable Fire-extinguishing media

Carbon dioxide, Foam (alcohol-resistant foam) and powder are effective fire-extinguishing agents.

Specific hazards arising from the chemical

Toxic gases and vapours; oxides of carbon are generated.

Special protective actions for fire fighters

Firemen should wear self-contained breathing apparatus and protective clothing when fighting chemical fires.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance of selection of personal protective equipments see Chapter 8 of this Safety Data Sheet.

Environmental Precautions

Prevent spills from entering drains or sewers and contact with soil.

Methods and materials for contaminated and cleaning up

For small spills, carefully flush with water. For large spills, contain spills. Do not touch or walk through spilled material. Dike ahead of large spills to prevent run-off. Mop, pump or absorb onto suitable absorbent and place in container for reuse, recycle or proper disposal. Flush area with water to eliminate residues.

SECTION VII – HANDLING AND STORAGE

Precautions for safe handling

Do not swallow. Avoid eyes and skin contact. Wear recommended protective equipment. Use only with adequate ventilation. Wash thoroughly after handling material.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed when not in use. Store in dry, cool, well-ventilated area away from incompatibles.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: Denature Alcohol NIOSH REL: 1900 mg/m³ OSHA PEL TWA 1900 mg/m³

Appropriate engineering control measure Under normal applications, general ventilation is adequate. Individual protection measure Protective Gloves Neoprene/ PVC gloves. Eye Protection Safety glasses with side shields are recommended. Respiratory Protection Not required under normal use conditions with good general ventilation. Protect against generated mist/ spray back.

Hygienic Work Practices

Wash hand after use. Do not eat, drink or smoke in immediate area.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES		
Appearance Physical State	Liquid	
Color	Clear to yellow	
Odour	Bland	
Odour Threshold	Not applicable	
рН	7±0.5	
Melting Point	Not applicable	
Freezing Point	-114.1°C (Ethyl alcohol)	
Boiling Point	78.5°C (Ethyl alcohol)	
Flash Point	13°C	
Evaporation Rate (Butyl Acetate = 1)	2	
Flammability (solid, gas)	Not applicable	
Upper explosive limit	19%	
Lower explosive limit	3.3%	
Vapour Pressure	44 mm Hg	
Vapour Density	1.59 (Air =1)	
Relative Density	$0.08 \text{ g/cm}^3 \pm 0.025$	
Solubility	Completely soluble in water	
Partition coefficient: n-octanol/water	Not applicable	
Viscosity	Free Flowing Liquid	
Auto-ignition Temperature	365 °C	

SECTION X – STABILITY & REACTIVITY

Reactivity/Incompatible materials

React with oxidizing materials.

Chemical stability

Stable under normal temperature and pressure.

Possible of hazardous reaction

Data not available.

Conditions to avoid

Heat, contact with incompatible materials, open flame.

Hazardous decomposition products

Burning may produce oxide of carbons and other substances.

SECTION XI – TOXICOLOGICAL INFORMATION

Denature Alcohol

Oral LD 50: 6200-17800 mg/kg (Rat) Dermal: >20,000gm / kg (Rabbit) Inhalation: >8000 mg/litre/4h (Rat)

PRIMARY ROUTES OF EXPOSURE

Xeye

Xskin

inhalation

other

Eyes: May injure tissue; moderately irritating causing redness.

Xoral

Skin: Unlikely to cause appreciable irritation even on repeated contact. Unlikely to be absorbed in harmful amounts. **Inhalation**: Moderately irritating to Respiratory tract and mucous membranes. Chronic exposure to the vapour may result in headache and symptoms of central nervous depression. Nasal and eye irritation well below the TLV. **Ingestion**: Headache, dizziness, dullness, gastric disorders and symptoms of nervous system depression.

Long-term toxicity: None of the components are listed as CMR* (*Carcinogenic, mutagenic or reproductive toxin).

SECTION XII – ECOLOGICAL INFORMATION

Eco-toxicity: There is no data available on the product itself.

Mobility: The product should not be allowed to enter drains or watercourses or be deposited where it can affect ground or surface waters. Avoid transfer into the environment.

Persistence and Degradability: There is no persistence or degradation data for any component of this product at this time. **Bio-accumulative Potential:** Not expected to bio-accumulate.

SECTION XIII – DISPOSAL

Dispose of in accordance with existing Federal, State and local environmental regulation.

SECTION XIV – TRANSPORT INFORMATION

Road and Rail: UN-No.: UN1170 Dangerous Goods Class: 3 Flammable Liquid Hazchem Code: 2[Y]E

Marine:

Packing Group: II

UN-No.: UN1170 Class: 3 Flammable Liquid Packing Group: II

Air Transport

UN-No.: UN1170 Class: 3 Flammable Liquid Packing Group: II

SECTION XV – REGULATORY INFORMATION

No information available for this product.

SECTION XVI – OTHER INFORMATION

H.M.I.S rating: Health - 2, Fire - 0, Reactivity - 1, Protection - B

Where

0 = Insignificant	
1 = Slight	A = Safety Glass
2 = Moderate	B = Safety Glass & Gloves
3 = Serious	C = Safety Glass, Gloves & Apron
4 = Severe	D = Face Shield, Gloves & Apron

Replace edition of: 10 March 2016

H.M.I.S: Hazardous Materials Identification System
CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
TWA8: The time weighted average concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect.
N.A: Not applicable
N/E: Not establish
N.D: Not determine

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