



# MATERIAL SAFETY DATA SHEET

## Ty-Ion C70

### I - PRODUCT IDENTIFICATION

**Company Name:** Nu-Calgon Wholesaler, Inc.  
**Address:** 2008 Altom Court, St. Louis, MO 63146-4151  
**Product Name:** Ty-Ion C70  
**Synonyms:** Phosphonate/polymer cooling tower treatment

**Tel No:** (314) 469-7000, (800) 554-5499  
**CHEMTREC:** (800) 424-9300  
**Product Number:** 7597

### II - HAZARDOUS INGREDIENTS OF MIXTURES

<u>MATERIAL</u>	<u>CAS#</u>	<u>% By Wt</u>	<u>TLV</u>	<u>PEL</u>
# Ethylene glycol	107-21-1	10	50ppm (ceiling)	50ppm (ceiling)
Potassium hydroxide	1310-58-3	<0.5	2mg/m3 (ceiling)	2mg/m3 (ceiling)

# Ingredient subject to reporting under Section 313 of Title III (SARA) and 40 CFR 372.

Product is non-toxic per Oral LD<sub>50</sub> and inhalation LC<sub>50</sub> criteria as published by NIOSH

All ingredients are TSCA listed.

### III - PHYSICAL DATA

**Vapor Pressure:** mm Hg: Like water  
**Evaporation Rate:** (ether=1): Like H<sub>2</sub>O  
**Solubility in H<sub>2</sub>O:** Complete  
**Freezing Point °F:** ~20°F  
**Boiling Point °F:** ~212°F  
**Specific Gravity H<sub>2</sub>O=1 @25° C:** 1.15

**Vapor Density (Air=1) 60-90° F:** Like H<sub>2</sub>O  
**VOC Content (% by wt.):** unknown  
**pH @ 50-300ppm Solution:** 7.5-9.0  
**pH as Distributed:** 11.5-12.5  
**Appearance:** Clear, yellow liquid  
**Odor:** Mild, Phosphonate odor

### IV - FIRE AND EXPLOSION

**Flash Point F:** none to boil TCC **Flammable Limits:** N/A  
**Extinguishing Media:** Use media suitable for source of fire.  
**Special Fire Fighting Procedures:** Use of a self-contained breathing apparatus is recommended.  
**Unusual Fire and Explosion Hazards:** None known.

### V - REACTIVITY DATA

**Stability - Conditions to avoid:** Stable  
**Incompatibility:** Strong acids.  
**Hazardous Decomposition Products:** Forced ignition of dried residues may produce CO, CO<sub>2</sub>, oxides of nitrogen and phosphenes.  
**Conditions Contributing to Hazardous Polymerizations:** Will not polymerize.

### VI - HEALTH HAZARD DATA

**EFFECTS OF OVEREXPOSURE (Medical Conditions Aggravated/Target Organ Effects),**  
**A. ACUTE (Primary Route of Exposure) EYES & SKIN:** Concentrate corrosive to tissues. Eye and skin irritant. **INHALATION:** Ethylene glycol fumes may cause dizziness. **INGESTION:** Harmful if swallowed. Excessive exposure may cause kidney and liver effects.  
**B. SUBCHRONIC, CHRONIC, OTHER:** Ethylene glycol has caused birth defects in laboratory animals.  
**C. MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:**

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## VII - EMERGENCY AND FIRST AID PROCEDURES

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**INHALATION:** Remove to fresh air and contact a physician.

**EYES:** Flush with water for 15 minutes and get medical attention.

**SKIN:** Flush with water for 15 minutes, removing contaminated clothing. If irritation persists, contact a physician.

**INGESTION:** Induce vomiting using a mild emetic. Call a physician immediately.

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## VIII - SPILL OR LEAK PROCEDURE

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**Spill Management:** Contain spills and leaks to prevent discharge to the environment. Take up on absorbent material.

**Waste Disposal Methods:** Keep concentrated product out of storm sewers, water sheds and water systems. Discharge to sanitary sewer in accordance with all applicable local, state and federal regulations. In case of large spill, dispose of through authorized scavenger service. Triple rinse the plastic containers thoroughly, remove labels and tender to reconditioner or dispose of in accordance with local regulations.

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## IX - PROTECTION INFORMATION/CONTROL MEASURES

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**Respiratory:** Not required under normal conditions of use

**Eye Protection:** Chemical splash goggles **Glove:** Rubber Gloves

**Other Clothing and Equipment:** Protective apron where potential for splashing exists.

**Ventilation:** Normal.

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## X - SPECIAL PRECAUTIONS

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**Precautions to be taken in Handling and Storing:** Product will withstand occasional freezing. If frozen, thaw to room temperature and mix thoroughly (roll drum). For industrial and institutional use only.

**Additional Information:** Read and observe all label instructions.

### NFPA

Health Hazard.....: 1

Fire Hazard.....: 0

Reactivity.....: 0

Specific Hazard....:

### HMIS RATING

Health Hazard.....: 1

Fire Hazard.....: 0

Reactivity.....: 0

Personal Protection....: X (Sec. 9)

**Revision Date:** 05/22/2003

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