MATERIAL SAFETY DATA SHEET

DRIP-RITE 2000 Page 1 of 4 Issue Date: 04/02

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product DRIP-RITE 2000

Common Name: Liquid water treating formula.

TSCA/CAS No.: This product is a mixture — there is no single CAS number.

Manufactured For

CMR Hydrology Division

P. O. Box 35000

Fresno, CA 93745-5000

Emergency Phone Numbers

Emergency Telephone: DAYS: (559) 499-2100 EVES.: (559) 431-7390

CHEMTREC (24-Hour Emergency Number): (800) 424-9300

EPA National Response Center: (800) 424-8802

SECTION 2. HAZARDOUS INGREDIENTS

<u>CHEMICAL</u>	CAS NO.	<u>%</u>	TLV OR PEL	RQ (lbs)
Glycolic Acid	79-14-1	62.8-65.7	N.P*	* N.A.
Water	7732-18-5	~ 30.0	N.P*	N.P*

^{*} N.A. - Not Available.

Note for Glycolic Acid component:

The total acid specification for 70% solution is 70-72%, and the typical free acid is 62.8-65.7%. At high concentrations, free glycolic acid exists in equilibrium with low molecular weight, polyester oligomers. Upon dilution, neutralization, etc., these components revert to free glycolic acid.

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Potential Health Effects:

This compound may cause burns and ulceration of the eyes, and is a severe skin irritant. Prolonged exposure may cause skin burns and ulceration. Inhalation may cause nose, throat, and lung irritation. Ingestion may cause burns and/or perforation of the gastrointestinal tract. Gross overexposure may result in death. Eye contact may cause eye corrosion with corneal or conjunctival ulceration. Skin contact may cause skin irritation with discomfort or rash. Higher or prolonged skin contact may cause burns or ulceration. Inhalation may cause irritation of the respiratory passages with cough, difficulty in breathing and bronchial irrigation. Ingestion may cause irritation of the gastrointestinal tract with abdominal pain, nausea, vomiting, diarrhea, and abnormal kidney function. Ingestion may also cause corrosion of mucus membranes with stomach discomfort, nausea, and prostration. Individuals with preexisting diseases of the skin, kidneys, or reproductive system may have increased susceptibility to the toxicity of excessive exposures.

Carcinogenicity information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

HEALTH: 3 REACTIVITY: 0 FLAMMABILITY: 0

(0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme)

^{*} N.P. - Not Pertinent.

SECTION 4. FIRST AID

Eyes: Immediately flush with water for at least 15 minutes. Seek medical attention immediately.

Skin: Flush with water for at least 15 minutes. Remove contaminated clothing and shoes. Seek

medical attention immediately. Wash clothing before reuse.

Inhalation: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Call a physician.

Ingestion: Do not induce vomiting. Give large quantities of water. Call a physician. Never give

anything by mouth to an unconscious person.

SECTION 5. FIRE AND EXPLOSION HAZARDS

Flammable Properties: Will not burn.

Fire and Explosion Hazard: Contact with active metals may produce flammable hydrogen gas.

Extinguishing Media: As appropriate for combustibles in area.

Fire Fighting Instructions: None

SECTION 6. SPILLS AND LEAKS

Safeguards

NOTE: Review fire fighting measures and handling (personnel) sections before proceeding with clean-up.

Use appropriate personal protective equipment during clean-up.

Accidental Release Measures

Neutralize spills with lime or soda ash. Flush spill area with plenty of water.

If Glycolic Acid – 70% solution is spilled and not recovered, or is recovered as a waste for treatment or disposal, the CERCLA reportable quantity is 100 lbs. (Release of an unlisted hazardous waste characteristic of corrosivity).

SECTION 7. STORAGE AND HANDLING

Handling: Avoid breathing mist. Do not get in eyes, on skin, or on clothing. Wash

thoroughly after handling.

Storage: Keep in a well-ventilated area. Protect bulk storage area from sparks and flame.

Keep packages tightly closed. Store above 10 degrees C (50 degrees F) melting

point.

SECTION 8. PERSONAL PROTECTIVE EQUIPMENT

Engineering Controls: Good general ventilation should be provided to keep mist concentrations

below the recommended exposure limit.

Personal Protective Equipment: Chemical splash goggles and rubber gloves. Wear a butyl rubber acid suit

and NIOSH permissible respiratory protection if there is a reasonable

possibility for exposure.

Exposure Limits: Glycolic Acid – 70% solution

PEL (OSHA): None Established TLV (ACGIH): None Established

AEL (DUPONT): 10 mg/m³, 8 & 12 HR. TWA

SECTION 9. PHYSICAL AND CHEMICAL DATA

Boiling Point: 112°C (234°F) @ 760 mm Hg

Vapor Pressure: Vapor is water Vapor Density: Vapor is water

Melting Point: 10 °C (50° F) (Precipitates)

Water Solubility: Miscible.

PH: 0.1 @ 25°C (77°F) Odor: Mild (Like burnt sugar)

Form: Clear liquid Color: Light amber

Density: 1.25 g/cc at 26°C (79°F)

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable.

Decomposition: Will not occur Polymerization: Will not occur

Incompatibility: Reacts with active metals (like sodium), oxidized agents (such as strong nitric

acid), cyanides, sulfides to produce hydrogen. Oxides of nitrogen, hydrogen

cyanide or hydrogen sulfide gases, respectively.

SECTION 11. POTENTIAL HEALTH EFFECTS

Animal Data

Glycolic Acid

Inhalation 4 hour LC50: 3.6 mg/L in male rats >5.2 mg/L in female rats

Oral LD50: 1,938 mg/kg in rats (70% technical grade)

Glycolic acid is a skin and eye corrosive, but is not a skin sensitizer in animals.

Toxic effects described in animals from single exposure to Glycolic Acid by inhalation include body weight losses, ocular and nasal discharge and nonspecific effects. Histopathological changes observed include mild to severe laryngeal ulceration; and minimal to mild nasal lesions and lung inflammation. Repeated exposures produced liver changes, spleen, liver and thymus changes, and gastrointestinal tract alterations.

Administration of single high oral doses of Glycolic Acid produced severe gastrointestinal tract irritation, liver damage, increased kidney weights and the formation of calcium oxalate crystals in the kidneys. Repeated dosing in cats produced weight and appetite loss, depression, vomiting, coma, convulsions, kidney failure due to calcium oxalate deposition and death; dogs given similar and higher does exhibited no toxic effects. Long-term dosing in male and female rats resulted in higher mortality in male rats (60-70%) and kidney toxicity due to calcium oxalate deposition. Female rats exhibited no toxic effects.

At high dietary levels, animal data show developmental toxicity but only at exposure levels producing other toxic effects in the adult animal. Glycolic Acid is not considered a unique developmental hazard to the conceptus. The compound does not produce genetic damage in bacterial cell cultures. It has not produced genetic damage in tests on animals.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic toxicity: Slight 24-48 Hour LC50, Bluegill sunfish: 93 mg/L 96 Hour LC50, Fathead Minnows: 164 mg/L

Biodegradability: Readily biodegradable

This data indicates that Glycolic Acid has slight aquatic toxicity. After 7 days, 89.6% is biodegraded (closed bottle test).

SECTION 13. DISPOSAL

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents in accordance with state and local regulation. Also, chemical additions or other alteration of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal. Do not discharge.

If approved, may be neutralized with lime or soda ash and flushed to wastewater treatment system. This material may be a RCRA hazardous waste due to its corrosive characteristic (pH).

SECTION 14. TRANSPORTATION

D.O.T. Shipping Description: Corrosive Liquid, Acidic, Organic, N.O.S. (Glycolic Acid), 8, UN

3265, PG II.

Other Shipping Description: Compounds, Water Treating, Liquid.

(NMFC Item 50313, LTL Class 65)

Reported/included

SECTION 15. REGULATORY INFORMATION

136/t inventory status.	reported, meraded		
TITLE III Hazard Classifications:			
Acute:	Yes		
Chronic:	No		
Fire:	No		
Reactivity:	No		
Pressure:	No		
CERCLA:	Yes		
SARA TITLE III, Section 313 Toxic Chemicals:	Yes		
SARA TOXIC CHEMICAL:	No		

SECTION 16. OTHER

TSCA Inventory status:

All information appearing in this document was based on data provided by third party sources and was compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act. The information is believed to be accurate as of the preparation date, but is not warranted as being the final authority in the use of this product. This information does not purport to be legal or medical advice.