

# Material Safety Data Sheet

OCT 28 1991

Manufacturer/Distributor: Ruger Chemical Co./

Amend Drug & Chemical Co.

Emergency Telephone No CHEMTREC NO. (800) 424-9300

Address 83 Cordier Street

Other Information Calls (201) 926-0331 NATIONAL RESPONSE CENTER NO. (800) 424-9300

Irvington, NJ 07111

Date Prepared MARCH 22, 1991

## TRICHLOROACETIC ACID

### PRODUCT IDENTIFICATION:

Synonyms: TCA; trichloroethanoic acid

Formula CAS No.: 76-03-9

Molecular Weight: 163.39

Chemical Formula:  $CCl_3COOH$

Hazardous Ingredients: Not applicable.

### PRECAUTIONARY MEASURES

**DANGER! CORROSIVE. CAUSES SEVERE BURNS. HARMFUL IF SWALLOWED OR INHALED. INHALATION MAY CAUSE LUNG DAMAGE.**

Do not get in eyes, on skin, or on clothing.

Avoid breathing dust.

Keep container closed.

Use with adequate ventilation.

Wash thoroughly after handling.

### EMERGENCY/FIRST AID

In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. If swallowed, DO NOT INDUCE VOMITING!

Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In all cases call a physician.

SEE SECTION 5.

DOT Hazard Class: Corrosive Material

### SECTION 1 Physical Data

Appearance: White, hygroscopic crystals.

Odor: Pungent odor.

Solubility: Very soluble in water.

Boiling Point: 198°C (388°F).

Melting Point: 58°C (136°F)

Specific Gravity: 1.6

Vapor Density (Air = 1): 5.6

Vapor Pressure (mm Hg): 1.3 @ 51°C

Evaporation Rate: No information found.

### SECTION 2 Fire and Explosion Information

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### SECTION 3 Reactivity Data

Stability: Stable under ordinary conditions of use and storage. Solutions are acidic.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, chloroform, hydrogen chloride.

Hazardous Polymerization: Will not occur.

Incompatibilities: Strong bases. Heating with alkali yields chloroform and alkali carbonate. Acid solutions in water can react with metals to liberate hydrogen gas.

### SECTION 4 Leak/Spill Disposal Information

Spills: Ventilate area of leak or spill. Clean-up personnel need protection against inhalation or contact with substance. Cover spill with excess sodium bicarbonate. Carefully sweep up the material and place in a corrosive resistant container for disposal. Disposal: Neutralize prior to burning. Burn in approved incinerator equipped with an afterburner and scrubber. Alternatively, neutralized waste may be disposed in an approved waste facility.

Ensure compliance with local, state and federal regulations.

RUGER CHEMICAL CO., INC.  
AMEND DRUG & CHEMICAL CO  
83 CORDIER STREET  
IRVINGTON, NJ 07111

TRICHLOROACETIC ACID

# Material Safety Data Sheet

Manufacturer/Distributor: Ruger Chemical Co./

Amend Drug & Chemical Co.

Address 83 Cordier Street

Irvington, NJ 07111

Emergency Telephone No

CHENTREC NO. (800) 424-8300

Other Information Calls

(201) 926-0331

NATIONAL RESPONSE CENTER NO. (800) 424-8802

Date Prepared

MARCH 22, 1991

## Addendum to Material Safety Data Sheet

### REGULATORY STATUS

#### Hazard Categories for SARA

#### Section 311/312 Reporting

Acute Chronic Fire Pressure Reactive

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X X

(Chem.Key: TRIAC)

Product or Components of Product:

TRICHLOROACETIC ACID (76-03-9)

SARA EHS Sect. 302  
RQ (lbs.) TPO (lbs.)

No

No

SARA Section 313 Chemicals  
Name List Chemical Category

No

No

CERCLA Sec.103  
RQ (lbs.)

No

RCRA  
Sec. 261.33

SARA Section 302 EHS RQ: Reportable Quantity of Extremely Hazardous Substance, listed at 40 CFR 355.

SARA Section 302 EHS TPO: Threshold Planning Quantity of Extremely Hazardous Substance. An asterisk (\*) following a Threshold Planning Quantity signifies that if the material is a solid and has a particle size equal to or larger than 100 micrometers, the Threshold Planning Quantity = 10,000 LBS.

SARA Section 313 Chemicals: Toxic Substances subject to annual release reporting requirements listed at 40 CFR 372.65.

CERCLA Sec. 103: Comprehensive Environmental Response, Compensation and Liability Act (Superfund). Releases to air, land or water of these hazardous substances which exceed the Reportable Quantity (RQ) must be reported to the National Response Center, (800-424-8802); Listed at 40 CFR 302.4

RCRA: Resource Conservation and Reclamation Act. Commercial chemical product wastes designated as acute hazards and toxic under 40 CFR 261.33

Effective Date: 04-06-89 Supersedes 07-13-87

TRICHLOROACETIC ACID

**SECTION 5 Health Hazard Information**

**A. EXPOSURE / HEALTH EFFECTS**

**Inhalation:**

Inhalation of dust may cause coughing, choking, with variable symptoms of headache, dizziness, and weakness. May cause lung edema; serious cases could be fatal.

**Ingestion:**

Corrosive. Sore throat, severe abdominal pain, vomiting, and tissue damage may occur.

**Skin Contact:**

Corrosive. Redness, pain, skin burns can occur.

**Eye Contact:**

Corrosive. Redness, pain, blurred vision can occur.

**Chronic Exposure:**

Long exposures to acid fumes may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of bronchial pneumonia may also occur.

**Aggravation of Pre-existing Conditions:**

Persons with skin disorders, eye problems, or respiratory problems may be more susceptible to the effects of this substance.

**B. FIRST AID**

**Inhalation:**

Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:**

**DO NOT INDUCE VOMITING!** Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin Exposure:**

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Call a physician immediately.

**Eye Exposure:**

Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**C. TOXICITY DATA (RTECS, 1986)**

Oral rat LD50: 5000 mg/kg. Oral mouse LD50: 5640 mg/kg Mutation references cited.

**SECTION 6 Occupational Control Measures**

**Airborne Exposure Limits:**

-OSHA Permissible Exposure Limit (PEL): 1 ppm (TWA)

-ACGIH Threshold Limit Value (TLV): 1 ppm (TWA)

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

**Personal Respirators: (NIOSH Approved)**

If the TLV is exceeded a full facepiece chemical cartridge respirator may be worn, in general, up to 100 times the TLV or the maximum use concentration specified by the respirator supplier, whichever is less. Alternatively, a supplied air full facepiece respirator or airlined hood may be worn.

**Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls to prevent skin contact.

**Eye Protection:**

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

**SECTION 7 Storage and Special Information**

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances.

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TRIAC