

MATERIAL SAFETY DATA SHEET

IDENTITY (As used on label and list)
CHROMIUM ETCHANT TFD

SECTION 1

Manufacturer's Name:
Transene Company, Inc.
Route One
Rowley, MA 01969

Chemtrec Emergency
Telephone: 1-800-424-9300
Information Telephone: 1-508-948-2501
Date Prepared: June 8, 1992
Signature of Preparer: Martin E. Hecht

SECTION II - Hazardous Ingredients/Identity Information

Hazardous Components	%	OSHA PEL	ACGIH TLV	Other limits Recommended
Ceric Sulfate CAS# 13590-82-4	10	N/A	N/A	N/A
Nitric Acid (HNO ₃) CAS# 7697-37-2	6	2ppm(TWA)	5mg/m ³	2ppm(TWA)
Sulfuric Acid CAS# 766-49-39	3	1mg/m ³	1mg/m ³	N/A
Aqueous Solution (non-hazard)	81	N/A	balance	N/A

SECTION III - Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H ₂ O = 1)	1.16
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	Miscible		
Appearance and Odor	Orange, red clear liquid		

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Non-flammable	N/A	N/A	N/A
Extinguishing Media: Water Spray			

Special Fire Fighting Procedures: full protective clothing and self-contained breathing apparatus NOISH approved.

Unusual Fire and Explosion Hazards: avoid inhalation of poisonous gas oxides of nitrogen. Avoid contact with organic material.

SECTION V - Reactivity Data

Stability

Unstable	<u> </u>
Stable	XX

Conditions to Avoid
Organic materials, strong oxidants,
heat.

Incompatibility (Materials to avoid): Carbides, H_2S , turpentine, combustible organics, reducing agents, organic matter, strong base metals.

Hazardous Decomposition or Byproducts: oxides of nitrogen, strong bases, metals.

Hazardous Polymerization May Occur _____
Will not Occur XX

Conditions to Avoid

Excessive heat

SECTION VI - Health Hazard Data

Route(s) of Entry

Inhalation?

Skin?

Ingestion?

Corrosive liquid & vapors

yes

yes

yes

Health Hazards (Acute and Chronic)

Corrosive! Vapors are irritating and may cause damage to the eyes. Splashes may cause severe burns and permanent eye damage.

Carcinogenicity:
no

NPT?
no

IARC Monographs?
no

OSHA Regulated?
no

Signs and Symptoms of Exposure:

Long term exposure to concentrated vapors may cause erosion of the teeth. CORROSIVE!
Inhalation can lead to breathing disorders. Eyes and skin irritation. May cause severe burns.

Medical Conditions Generally Aggravated by Exposure: Person with pre-existing skin disorders or eye disease may be more susceptible to the effects of this substance.

Emergency and First Aid Procedures:

Contact: Wash thoroughly with water.

Inhalation: Call doctor and give artificial respiration if victim is not breathing.

Ingestion: Call doctor and if patient is conscious, give large quantities of water.

DO NOT INDUCE VOMITING!

Eyes: Wash eyes with plenty of water at least 15 minutes. get medical attention immediately.

SECTION VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Isolate or enclose the area of spill or leak. Neutralize with calcium carbonate, wash with excess water. Pick up with absorbent material (sand or vermiculite) and dispose in a RCRA approved waste facility.

Waste Disposal Method: Clean-up personnel should wear protective clothing and respiratory equipment suitable for toxic fumes. Dispose of in accordance with local, state or federal regulations.

Precautions to Be Taken in Handling and Storing

Store in a well-ventilated area. Room temperature storage - sealed bottles.

Other Precautions: Store away from incompatible materials. Protect from physical damage and direct sunlight.

SECTION VIII - Control Measures

Respiratory Protection (Specify Type)

If TLV is exceeded, wear a self-contained breathing apparatus

Ventilation	Local Exhaust: Preferred to	Special: Eye bath & Shower
	keep employee limits below airborne	facilities near work area.
	exposure limits.	

Mechanical (General)

Other

N/A

N/A

Protective Gloves

Eye Protection

Imperious Rubber

Goggles, safety glasses

Other Protective Clothing or Equipment

Rubber apron/ use appropriate industrial practices for handling acids.

Work/Hygienic Practices

Use appropriate care for handling corrosive liquids.

Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Transene extends no warranties, makes no representations and assumes no responsibility as to accuracy or suitability of such information for application to purchaser's intended purpose or for consequences of its use.

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Material Safety Data

ROUTE ONE, ROWLEY, MASS. 01969
Tel. (617) 948-2501, 948-2811

TRANSENE COMPANY, INC.

Addendum to Material Safety Data Sheet

REGULATORY STATUS

This Addendum Must Not Be

Detached from the MSDS

Identifies SARA 302 substances

Any copying or redistribution of the MSDS

must include a copy of this addendum

Hazard Categories for SARA

Section 311/312 Reporting

Acute Chronic Fire Pressure Reactive

Product or Components
of Product:

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

SARA Section 313 Chemicals
Name List Chemical Category

CERCLA Sec. 103
RQ (lbs.)

RCRA
Sec. 261.33

Sulfuric Acid (7664-93-9)

1000

1000

Yes

No

1000

No

Nitric Acid (7697-37-2)

No

No

Yes

No

No

No

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: 02-17-87 Supersedes 04-30-86

CHROMIUM ETCH TFD