

Material Safety Data Sheet U.S. Department of Labor

May be used to comply with Occupational Safety and Health Administration

OSHA's Hazard Communication Standard, (Non-Mandatory Form)

29 CFR 1910.1200. Standard must be Form Approved

consulted for specific requirements. OMB No. 1218-0072

IDENTITY (As Used on Label and List) Note: Blank spaces are not permitted. If any item is not applicable, or no

CHROMIUM ETCHANT TYPE 1020 information is available, the space must be marked to indicate that.

Section I

Manufacturers Name

TRANSENE COMPANY INC.

Emergency Telephone Number

CHEMTREC 24HR# 1-800-424-9300

Address

10 ELECTRONICS AVENUE

Telephone Number for Information

(978)777-7860 fax: (978)739-5640

DANVERS MA 01923

Date Prepared

REVISED 11-99

Signature of Preparer (Optional)

Section II – Hazardous Ingredients / Identity Information

Other Limits

Hazardous Components (Specific Chemical Identity Common Name(s)) OSHA PEL ACGIH TLV Recommended % (optional)

CERIC AMMONIUM NITRATE CAS# 16774-21-3 orl rat LC₅₀ 244ppm * 16

NITRIC ACID (HNO₃) CAS# 7697-37-2 2ppm 6

NON-HAZARDOUS AQUEOUS SOLUTION

* AS NITRATE

(THIS PRODUCT CONTAINS NO MORE THAN 6% BY WT. NITRIC ACID, WHICH IS CONSIDERED TO BE A TOXIC CHEMICAL UNDER TITLE III. EMISSIONS DATA MUST BE SUBMITTED ANNUALLY TO THE EPA FOR COMPANIES WHO MANUFACTURE, PROCESS OR OTHERWISE USE THIS PRODUCT IN EXCESS OF CERTAIN QUANTITIES ESTABLISHED BY THE EPA. THIS INFORMATION MUST BE INCLUDED IN ALL MSDS THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.)

Section III - Physical/Chemical Characteristics

Boiling Point (100°C)	^{212°F}	Specific Gravity (H₂O=1) @ 25°C	1.16
Vapor Pressure (mm Hg.)	N/A	Melting Point % VOLATILES:	85 %
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	Similar to water

Solubility in Water: COMPLETE

Appearance and Odor: ORANGE LIQUID WITH PRACTICALLY NO ODOR.

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used) NON- FLAMMABLE	Flammable Limits	LEL	UEL
	N/A	---	---

Extinguishing Media: WATER SPRAY IN CASE OF FIRE CAUSED BY SPILLAGE. DO NOT USE ORGANIC FIRE EXTINGUISHING AGENTS.

Special Fire Fighting Procedures: WEAR NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS AND APPROPRIATE PROTECTIVE APPAREL

Unusual Fire and Explosion Hazards: SPILLAGE MAY CAUSE FIRE OR LIBERATE DANGEROUS GAS.

INCREASES FLAMMABILITY OF COMBUSTIBLE ORGANICS AND DEADLY OXIDIZABLE

MATERIALS. MAY CAUSE IGNITION.

Section V — Reactivity Data

Stability: Unstable Conditions to Avoid

Stable X ORGANIC MATERIALS, STRONG OXIDANTS, HEAT

Incompatibility (Materials to Avoid): METALLIC POWDERS, CARBIDES, HYDROGEN SULFIDE AND EASILY OXIDIZED MATERIALS

Hazardous Decomposition or Byproducts:

OXIDES OF NITROGEN, STRONG BASES, AND METALS

Hazardous Polymerization May Occur Conditions to Avoid

Will Not Occur X EXCESSIVE HEAT

Section VI- Health Hazard Data

Route(s) of Entry: Inhalation? Skin? Ingestion?

YES YES YES

Health Hazards (Acute and Chronic)

MAY CAUSE IRRITATION TO LUNGS AND RESPIRATORY SYSTEM.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

NO NO YES

Signs and Symptoms of Exposure:

MAY CAUSE IRRITATION AND BURNS.

Medical Conditions Generally Aggravated by Exposure:

MAY CAUSE IRRITATION AND BURNS. VAPOR OR SPRAYS CAN BE HAZARDOUS TO THE LUNGS AND RESPIRATORY SYSTEM. MATERIAL IS CORROSIVE TO EYES, SKIN, AND MUCOUS MEMBRANES. **Emergency and First Aid Procedures:**

EYE CONTACT: IMMEDIATELY GET MEDICAL ATTENTION.

SKIN: REMOVE CONTAMINATED CLOTHING AND SHOES. WASH EXPOSED AREA WITH SOAP AND WATER. GET MEDICAL ATTENTION.

INHALATION: REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION

INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION!

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 ENVIRONMENTAL REGULATIONS.

Precautions to Be Taken in Handling and Storing: STORE IN 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 NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS.

Ventilation: Local Exhaust: MAINTAIN ADEQUATE VENTILATION

Mechanical (general): EXPOSURE TO LIMITS BELOW AIRBORNE EXPOSURE LIMITS

Special: EYE BATH AND SHOWER FACILITIES WORK AREA.

Protective Gloves: RUBBER

Eye Protection: CHEMICAL SAFETY GOGGLES OR FACE SHEILD.

Other Protective Clothing or Equipment:

PROTECTIVE CLOTHING, RUBBER APRON / USE APPROPRIATE INDUSTRIAL PRACTICES FOR HANDLING ACIDS.

Work / Hygienic Practices: USE APPROPRIATE INDUSTRIAL PRACTICES FOR HANDLING ACIDS.