

IHS000012453
HC-CO

MATERIAL SAFETY DATA SHEET

H - 2
F - 0
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SECTION I GENERAL INFORMATION

PRODUCT NAME OR NUMBER
CHEM TREAT CT-4

EMERGENCY PHONE NUMBER
Chemtrec 800/424-9300

MANUFACTURER NAME/ADDRESS/PHONE
Dacor Chemical Company
1007 McCartney Street
Pittsburgh, PA 15220
412/921-3620

DOT HAZARDOUS MATERIAL PROPER NAME
Chromic Acid Solution

DOT HAZARD CLASS
8, Corrosive, UN 1755, PG II, R.O.

CHEMICAL FAMILY
Chromate and Fluoride Compounds
in Water.

CHEMICAL FORMULA
See Below

SECTION II CHEMICAL COMPONENTS

	TLV	CAS NO.	PCT %
Ammonium Bichromate	N/A	7789-09-5	10 - 20
Chromic Acid	N/A	1333-82-01	3 - 10
Ammonium Bifluoride	N/A	1341-49-7	3 - 10

Note: Other ingredients of the product are non-hazardous.
Note: See Attachment.

SECTION III PHYSICAL DATA

Boiling point (760 mm Hg)	212°F	Solubility in Water	Complete
Vapor Pressure (@ 20°C)	H ₂ O	pH (As Received)	4.1
Vapor Density (Air = 1)	H ₂ O	Specific Gravity	1.2
Volatiles by volume (%)	78	Evaporation Rate (Ethyl Ether = 1)	H ₂ O

APPEARANCE N/A	COLOR Orange	ODOR No Odor	MATERIAL IS A Liquid
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SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method) N/A	FLAMMABLE LIMITS LEL: N/A UEL: N/A	IGNITION TEMPERATURE N/A
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EXTINGUISHING MEDIA
Water, CO₂ and dry chemical media may be used in area.

SPECIAL FIRE FIGHTING PROCEDURES
Material can give off toxic gases if exposed to high heat. Wear respirator if fire occurs near material. Material itself is not combustible, but strong oxidizer.

UNUSUAL FIRE AND EXPLOSION HAZARDS
High heat can cause explosion of drums due to decomposition of vapor generation. Keep drums cool and remove from fire area.

NOTE: N/A = Not Available N/E = Not Established

Information on this form is furnished solely for the purpose of compliance with OSHA for any other purpose.

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To	TIM SHEETZ		From	DACC	
Co./Dept.		Co.			
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SECTION V PHYSIOLOGICAL EFFECTS

TLV (UNITS): N/A

EFFECTS OF EXPOSURE

Eyes: Will severely irritate, may burn, can cause conjunctivitis.

Skin: May cause burns and ulcers.

Ingestion: Toxic, can be fatal.

EMERGENCY AND FIRST AID PROCEDURES

Eyes: Immediately flush eyes for at least 15 minutes. Call a physician.

Skin: Wash with copious amounts of water. Apply 1cc 0.13% Zephiran Chloride solution (in water). Soak for 45 minutes. Consult a physician.

Ingestion: Get immediate medical help.

SECTION VI REACTIVITY DATA

STABLE (x)	UNSTABLE ()	CONDITIONS TO AVOID	MATERIALS TO AVOID
		Very strong oxidizing agent. Avoid heat and ignition sources. Avoid contact with oxidizable materials, eg. oils, greases, organic materials.	Reducing agents, certain organic materials.

HAZARDOUS DECOMPOSITION OR COMBUSTION PRODUCTS

Chromic oxide, nitrogen, water vapor, ammonia, hydrogen fluoride.

HAZARDOUS POLYMERIZATION

May occur () Will not occur (x)

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Contain spill with absorbant materials. Dispose of solid absorbant in accordance to applicable regulations.

WASTE DISPOSAL METHOD

Do not discharge to streams or contaminate underground water supplies. Disposal method must be in accordance with applicable regulations in the area.

SECTION VIII PROTECTIVE EQUIPMENT

Respiratory:

Ventilation:

For Eyes: Chemical Safety Goggles or Face Shield

For Skin: Rubber Gauntlet-Type Gloves

Other Protective Equipment: Rubber shoes, rubber apron and other suitable protective clothing, fresh work clothes daily, wash contaminated clothing before reuse.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in cool area away from incompatible materials.

OTHER PRECAUTIONS:

Material is highly oxidizing.

SECTION X REGULATORY INFORMATION

Product contains ingredients subject to Sara Title III reporting requirements. Reportable quantities are: Chromic Acid - 10 pounds, Ammonium Bichromate - 10 pounds, Ammonium Bifluoride - 100 pounds.

MSDS/Chem Treat CT-4

Date of Latest Review/Revision: 10/83

ATTACHMENT A

**SECTION 06 HEALTH HAZARD DATA for Hexavalent Chromium Compounds
including Chromic Acid and Sodium Bichromate****HEALTH HAZARD DATA**

Acute Oral LD₅₀ greater than 50 less than 500 Mg/Kg "Rat"
Acute Dermal LD₅₀ less than 200 Mg/Kg

PRIMARY SKIN IRRITATION INDEX IS 4.9/8.0

Eye Irritation Score is 60.8/110
LC₅₀ greater than 0.180 Mg/l

INHALATION

- * Inhalation of dusts or mists may cause irritation of the nasal septum and respiratory tract. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum.

SKIN CONTACT

- * Contact with broken skin may lead to formation of firmly margined "Chrome Sores".

SKIN ABSORPTION

- * Massive overexposure to solutions could lead to electrolyte imbalance, kidney failure, and death.

EYE CONTACT

- * Overexposure will cause severe irritation and potential permanent damage to the eyes. Exposure to low level concentrations may cause moderate irritation or conjunctivitis.

INGESTION

- * Can cause severe tissue destruction and death as a result of electrolyte imbalance and kidney failure.

EFFECTS OF OVEREXPOSURE

- * Acute of Overexposure -- Causes severe irritation to eyes. May cause deep, painful, penetrating ulcers of skin. May cause severe irritation of the respiratory tract and nasal septum and possible perforation.

CHRONIC OVEREXPOSURE

- * Prolonged or repeated eye contact may cause conjunctivitis.
- * Prolonged or repeated skin contact, especially with broken skin, may cause "Chrome Sores".
- * Ulceration and perforation of the nasal septum may result from prolonged or repeated inhalation of sodium bichromate dusts and mists.

CANCER RISK

- * There is evidence of the carcinogenicity of hexavalent chromium compounds both in humans and experimental animals.

CT4

FIRST AID PROCEDURES AND PHYSICIAN NOTES

Object is to seek medical attention immediately.

EYES

- * Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids apart to ensure flushing of entire eye surface. Washing eyes within one minute is essential to achieve maximum effectiveness. Seek medical attention immediately.

SKIN

- * Wash contaminated areas with plenty of soap and water. Remove contaminated clothing and footwear, and wash clothing before reuse. Discard footwear which cannot be decontaminated. Seek medical attention immediately.

INHALATION

- * Get person out of contaminated area to fresh air. If breathing has stopped, artificial respiration should be started. Oxygen may be administered, if readily available. Irrigate nasal passages and mouth with salt water. Seek medical attention immediately.

INGESTION

- * If swallowed, do not induce vomiting. Give large quantities of water, if available. Give several glasses of milk. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

NOTES TO PHYSICIAN

- * Massive dermal overexposure to solutions of sodium bichromate can lead to electrolyte imbalance, kidney failure, and death. Death has been avoided in several cases through the use of early renal dialysis. Skin ulcers may be treated by removal from exposure. Daily cleansing and debridement, and application of antibiotic cream and dressings to prevent further exposure or contamination.