Material Safety Data Sheet
Chromium (VI) Trioxide

ACC# 04940

Section 1 - Chemical Product and Company Identification

MSDS Name: Chromium (VI) Trioxide
Catalog Numbers: S79969, S79969ACS-1, S79969ACS-2, A100-100, A100-212, A100-500, A98-212, A98-500, S79969ACS
Synonyms: Chromic acid; Chromic anhydride; Chromium(VI) oxide; Chromium trioxide.
Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1333-82-0	Chromium trioxide	>98	215-607-8

Hazard Symbols: T O C N
Risk Phrases: 25 35 43 8 49

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: dark red to purple solid. **Danger!** Strong oxidizer. Contact with other material may cause a fire. Corrosive. Causes digestive and respiratory tract burns. Causes severe eye and skin burns. Sensitizer. May cause liver and kidney damage. Harmful if swallowed. Corrosive to metal.
Target Organs: Kidneys, liver, lungs, respiratory system, gastrointestinal system, eyes, skin, mucous membranes.

Potential Health Effects

Eye: May cause irreversible eye injury. Contact with eyes may cause severe irritation, and possible eye burns.
Skin: May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May cause irritation with burning pain, itching and redness. May cause deep, penetrating ulcers of the skin. May be absorbed through damaged or abraded skin in harmful amounts. Chronic exposure to water insoluble hexavalent chromium compounds has been shown to be associated with lung cancer and gastrointestinal tract tumors.
Ingestion: Harmful if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May cause liver and kidney damage.
Inhalation: May cause irritation of the respiratory tract with burning pain in the nose and throat,

coughing, wheezing, shortness of breath and pulmonary edema. May cause asthmatic attacks due to allergic sensitization of the respiratory tract.
Chronic: Prolonged or repeated inhalation may cause nosebleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pain and bronchitis. Prolonged or repeated eye contact may cause conjunctivitis. Prolonged or repeated skin contact may cause sensitization dermatitis and possible destruction and/or ulceration. Chronic ingestion may cause effects similar to those of acute ingestion. Chronic exposure to water insoluble hexavalent chromium compounds has been shown to be associated with lung cancer and gastrointestinal tract tumors.

Section 4 - First Aid Measures

Eyes: Get medical aid immediately. Extensive irrigation with water is required (at least 30 minutes).
Skin: Get medical aid. Wash clothing before reuse. Rinse area with large amounts of water for at least 15 minutes. Destroy contaminated shoes.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Strong oxidizer. Contact with combustible materials may cause a fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Containers may explode in the heat of a fire. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.
Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire. May require flooding with water in order to eliminate hazardous reactions since the materials generate their own oxygen.
Flash Point: 250 deg C (482.00 deg F)
Autoignition Temperature: None available.
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability: 1; Special Hazard: OX

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation. Do not use combustible materials such as paper towels to clean up spill.

ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	CHROMIUM TRIOXIDE, ANHYDROUS				CHROMIUM TRIOXIDE ANHYDROUS
Hazard Class:	5.1				5.1(8)(9.2)
UN Number:	UN1463				UN1463
Packing Group:	II				II

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 1333-82-0 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
CAS# 1333-82-0: Present34 TD(Health & Safety Report7-s33.4867 cSCAHa Ev2.8927 -1.2 Tf9.1133 0 TD(

California No Significant Risk Level: None of the chemicals in this product are listed.

European / International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:
T O C N

Risk Phrases:
R 25 Toxic if swallowed.
R 35 Causes severe burns.
R 43 May cause sensitization by skin contact.
R 8 Contact with combustible material may cause fire.
R 49 May cause cancer by inhalation.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 53 Avoid exposure - obtain special instructions before use.
S 60 This material and its container must be disposed of as hazardous waste.
S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)
CAS# 1333-82-0: 3

Canada - DSL/NDSL
CAS# 1333-82-0 is listed on Canada's DSL List.

Canada - WHMIS
This product has a WHMIS classification of C, D1B, D2A, E.

Canadian Ingredient Disclosure List
CAS# 1333-82-0 is listed on the Canadian Ingredient Disclosure List.

Exposure Limits
CAS# 1333-82-0: OEL-FINLAND;Carcinogen OEL-FRANCE:TWA 0.05 mg/m3;STEL 0.1 mg/m3;Carcinogen OEL-GERMANY;Carcinogen OEL-RUSSIA:STEL 0.01 mg/m3;Skin OEL-SWITZERLAND:TWA 0.05 mg/m3;STEL 0.1 mg/m3 OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 6/04/1998
Revision #6 Date: 4/08/2002

The information above is believed to be accurate and represents the best information currently available to us.