Material Safety Data Sheet
Chromyl chloride, 99+%

MSDS# 07774

Section 1 - Chemical Product and Company Identification

MSDS Name:	Chromyl chloride, 99+%
Catalog Numbers:	AC190460000, AC190460100, AC190460250
Synonyms:	Chromic oxychloride, Chromium chloride oxide, Chromium dioxychloride; Chromium oxychloride; Dichlorodioxochromium; Chlorochromic anhydride; Chromium dichloride dioxide; Chromium dioxide dichloride.

Company Identification:	Acros Organics BVBA Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium
Company Identification: (USA)	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	800-ACROS-01
For information in Europe, call:	+32 14 57 52 11
Emergency Number, Europe:	+32 14 57 52 99
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300
CHEMTREC Phone Number, Europe:	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#:	14977-61-8
Chemical Name:	Chromyl chloride
%:	> 99
EINECS#:	239-056-8

Hazard Symbols: T O C N




Risk Phrases: 46 49 35 43 50/53 8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Strong oxidizer. Contact with other material may cause a fire. May cause allergic skin reaction. Corrosive. Water-reactive. Light sensitive. Cancer suspect agent. Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. Corrosive to metal. Target Organs: Kidneys, liver, lungs, respiratory system, eyes, skin.

Potential Health Effects

Eye:	Causes eye burns. Vapors cause eye irritation.
Skin:	Causes skin burns. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May cause blistering of the skin.

Ingestion: May cause severe and permanent damage to the digestive tract.

Inhalation: May cause severe allergic respiratory reaction. Causes chemical burns to the respiratory tract.

Chronic: May cause liver and kidney damage. 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: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

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 other material may cause fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Water reactive. Material will react with water and may release a flammable and/or toxic gas. Containers may explode in the heat of a fire. Contact with metals may evolve flammable hydrogen gas. Use water spray to knock down acid vapors.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire. If water is the only media available, use in flooding amounts. Do NOT get water inside containers. Contact professional fire-fighters immediately. Cool containers with flooding quantities of water until well after fire is out. For small fires, use dry chemical or carbon dioxide.

Autoignition Temperature: Not available

Flash Point: Not applicable.

Explosion Limits: Lower: N/A

Explosion Limits: Upper: N/A

NFPA Rating: ; Special Hazard: OX

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Provide ventilation. Do not expose spill to water. Do not get water inside containers.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Avoid contact with clothing and other combustible materials. Avoid ingestion and inhalation. Discard contaminated shoes. Use only with adequate ventilation.

Storage: Do not store near combustible materials. Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Water free area. Do not store in metal containers. Store protected from light. Containers may be glass, aluminum, stainless steel.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Chromyl chloride	0.025 ppm	0.001 mg/m3 TWA (as Cr(VI))	5 æg/m3 TWA (listed under

				Chromium (VI)
				compounds).2.5
				æg/m3 Action
				Level (as Cr.);
				5 æg/m3 TWA (as
				Cr, Cancer
				hazard - see 29
				CFR 1910.1026)
				(listed under
				Chromium (VI)
				compounds).

OSHA Vacated PELs: Chromyl chloride: None listed

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: dark red

Odor: acrid odor - pungent odor

pH: Not available

Vapor Pressure: 20 mm Hg @ 20 deg C

Vapor Density: 5.3 (Air=1)

Evaporation Rate: Not available

Viscosity: Slightly

Boiling Point: 117 deg C (242.60°F)

Freezing/Melting Point: -96.5 deg C (-141.70°F)

Decomposition Temperature: Not available

Solubility in water: Reacts

Specific Gravity/Density: 1.9100g/cm3

Molecular Formula: Cl2CrO2

Molecular Weight: 154.90

Section 10 - Stability and Reactivity

Chemical Stability: Decomposes on exposure to light. Fumes in moist air. Reacts with water to form chromic acid, chromic chloride, HCl and chlorine.

Conditions to Avoid: Light, moisture.

Incompatibilities with Other Materials: Water, metals, strong reducing agents, alcohols, ammonia, phosphorus, sulfur, urea, acetone, organic matter, sodium azide, halides, phosphorus trichloride, turpentine, combustible materials.

Hazardous Decomposition Products: Hydrogen chloride, chlorine, toxic chromium oxide fumes.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 14977-61-8: GB5775000

LD50/LC50: RTECS: Not available.

Carcinogenicity: Chromyl chloride - California: carcinogen, initial date 2/27/87 (Chromium (VI) compounds). NTP: Known carcinogen (Chromium (VI) compounds). IARC: Group 1 carcinogen

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Please contact Fisher Scientific for shipping information
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T O C N

Risk Phrases:

R 46 May cause heritable genetic damage.

R 49 May cause cancer by inhalation.

R 35 Causes severe burns.

R 43 May cause sensitization by skin contact.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 8 Contact with combustible material may cause fire.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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# 14977-61-8: 3

Canada

CAS# 14977-61-8 is listed on Canada's NDSL List

Canadian WHMIS Classifications: C, E, D2A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 14977-61-8 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 14977-61-8 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 2/17/1998

Revision #7 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
