

Material Safety Data Sheet

Material Name: Quilon M - Chromium Complex

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information

Zaclon LLC
2981 Independence Road
Cleveland, OH 44115

Phone: 216-271-1569 or 800-356-7327
Fax: 216-271-1792
Emergency # 800-424-9300 CHEMTREC

*** Section 2 - Hazards Identification ***

Emergency Overview

May cause eye, skin and respiratory tract irritation. Ingestion of this material may cause gastrointestinal tract irritation.

Potential Health Effects: Eyes

May cause eye irritation.

Potential Health Effects: Skin

May cause skin irritation.

Potential Health Effects: Ingestion

Not considered a likely route of exposure under normal product use conditions. May cause gastrointestinal irritation if swallowed.

Potential Health Effects: Inhalation

May cause respiratory tract irritation.

HMIS Ratings: Health: 3 Fire: 3 HMIS Reactivity 1

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
67-63-0	Isopropyl alcohol	55-60
15659-56-0	Chromium, tetrachloro- μ -hydroxy[μ -(tetradecanoato-O:O')]di-	25-30
67-64-1	Acetone	5-15

*** Section 4 - First Aid Measures ***

First Aid: Eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

First Aid: Skin

Flush skin with water after contact. Wash contaminated clothing before reuse.

First Aid: Ingestion

If swallowed, do not induce vomiting. Give two glasses of water or activated charcoal slurry. Call a physician. Never give anything by mouth to an unconscious person.

First Aid: Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

First Aid: Notes to Physician

To prepare activated charcoal slurry, suspend 50 gm of activated charcoal in 400 mL of water in a bottle and shake well. Give 5 mL/kg of body weight, or 350 mL for an average adult.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.

Product is a flammable liquid.

Hazardous Combustion Products

Decomposes with heat; solvent vapors and gaseous hydrogen chloride will be emitted.

Extinguishing Media

Water, Dry Chemical, Alcohol Foam, CO₂.

Material Safety Data Sheet

Material Name: Quilon M - Chromium Complex

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear. Evacuate personnel to a safe area. Cool tank/container with water spray.

NFPA Ratings: Health: 3 Fire: 3 Reactivity: 1

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Containment Procedures

Remove source of heat, sparks, flame, impact, friction or electricity. Stop the flow of material, if this is without risk.

Clean-Up Procedures

Wear protective clothing. Dike spill; soak up with sand, earth, or other non-combustible absorbent material and dispose of in covered metal containers. Prevent liquid from entering sewers, waterways, or low area. After bulk removal, flush spill area with plenty of water.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Do not get in eyes. Avoid breathing vapors or mist. Wash thoroughly after handling. Avoid contact with skin and clothing.

Storage Procedures

Keep away from heat, sparks, and flame. Keep containers tightly closed and in an upright position. Do not store or mix with oxidizing agents. Best temperature for stability is below 32 deg C (90 deg F) and above freezing point.

* * * Section 8 - Exposure Controls / Personal Protection * * *

A: Component Exposure Limits

Isopropyl alcohol (67-63-0)

ACGIH: 200 ppm TWA
400 ppm STEL
OSHA: 400 ppm TWA; 980 mg/m3 TWA
500 ppm STEL; 1225 mg/m3 STEL
NIOSH: 400 ppm TWA; 980 mg/m3 TWA
500 ppm STEL; 1225 mg/m3 STEL

Acetone (67-64-1)

ACGIH: 500 ppm TWA
750 ppm STEL
OSHA: 750 ppm TWA; 1800 mg/m3 TWA
2400 mg/m3 STEL (The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors); 1000 ppm STEL
NIOSH: 250 ppm TWA; 590 mg/m3 TWA

Engineering Controls

Good general ventilation should be provided to keep component concentrations below the recommended exposure limits and avoid flammable mixtures with air. Use explosion-proof motors, electrical fittings, and nonsparking tools and equipment. Containers should be grounded.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear coverall chemical splash goggles. Additionally, wear a face shield where the possibility exists for face contact due to splashing or spraying of material.

Personal Protective Equipment: Skin

Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, jacket, hood and boots.

Material Safety Data Sheet

Material Name: Quilon M - Chromium Complex

Personal Protective Equipment: Respiratory

Wear NIOSH approved respiratory protection as appropriate.

Personal Protective Equipment: General

Eye wash fountain and emergency showers are recommended.

***** Section 9 - Physical & Chemical Properties *****

Appearance:	Blue green	Odor:	Alcohol
Physical State:	Liquid	pH:	2.6-2.7
Vapor Pressure:	ND	Vapor Density:	2.25 C (77 F)
Boiling Point:	82 C (180 F) @ 760 mm Hg	Melting Point:	ND
Solubility (H2O):	Soluble	Specific Gravity:	0.93-0.97
Evaporation Rate:	>1	VOC:	ND
Octanol/H2O Coeff.:	ND	Flash Point:	0 to 4 C (32-39 F)
Flash Point Method:	TOC	Upper Flammability Limit (UFL):	12
Lower Flammability Limit (LFL):	2	Burning Rate:	ND
Auto Ignition:	>399 C (>750 F)		

***** Section 10 - Chemical Stability & Reactivity Information *****

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Keep away from sparks, heat, and other ignition sources.

Incompatibility

Oxidizing agents.

Hazardous Decomposition

Decomposes with heat; solvent vapors and gaseous hydrogen chloride will be emitted.

Possibility of Hazardous Reactions

Will occur with water.

***** Section 11 - Toxicological Information *****

Acute Dose Effects

A: General Product Information

Inhalation may cause irritation of the upper respiratory passages, with coughing and discomfort; and temporary central nervous system depression with dizziness, headache, confusion, incoordination, drowsiness, and loss of consciousness.

Skin contact may cause irritation with itching, redness or rash. Significant skin permeation, and systemic toxicity, after contact appears unlikely.

Eye contact may cause irritation or injury with tearing, pain or blurred vision; eye corrosion with corneal or conjunctival ulceration.

Ingestion may cause irritation of the digestive tract with stomach pain, heartburn, nausea, vomiting or diarrhea; however there may be no symptoms at all. A major ingestion hazard is aspiration (liquid entering the lungs during ingestion or vomiting) which may result in "chemical pneumonia".

Inhalation, ingestion or skin contact with Isopropyl Alcohol may include non-specific effects such as headache, nausea and weakness; flushing of the face; and low blood pressure.

Increased susceptibility to this product may be observed in persons with pre-existing disease of the skin and lungs.

Material Safety Data Sheet

Material Name: Quilon M - Chromium Complex

B: Component Analysis - LD50/LC50

Isopropyl alcohol (67-63-0)

Inhalation LC50 Rat 72.6 mg/L 4 h; Oral LD50 Rat 4396 mg/kg; Dermal LD50 Rat 12800 mg/kg; Dermal LD50 Rabbit 12870 mg/kg

Acetone (67-64-1)

Oral LD50 Rat 5800 mg/kg

Carcinogenicity

A: General Product Information

None of the components present in this material at concentrations equal to or greater than 0.19 are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

B: Component Carcinogenicity

Isopropyl alcohol (67-63-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Supplement 7 [1987]; Monograph 15 [1977] (Group 3 (not classifiable))

Acetone (67-64-1)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Isopropyl alcohol (67-63-0)

Test & Species

		Conditions
96 Hr LC50 Pimephales promelas	9640 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	11130 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	>1400000 µg/L	
96 Hr EC50 Desmodesmus subspicatus	>1000 mg/L	
72 Hr EC50 Desmodesmus subspicatus	>1000 mg/L	
48 Hr EC50 Daphnia magna	13299 mg/L	

Acetone (67-64-1)

Test & Species

		Conditions
96 Hr LC50 Oncorhynchus mykiss	4.74 - 6.33 mL/L	
96 Hr LC50 Pimephales promelas	6210 - 8120 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	8300 mg/L	
48 Hr EC50 Daphnia magna	10294 - 17704 mg/L [Static]	
48 Hr EC50 Daphnia magna	12600 - 12700 mg/L	

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

Component Waste Numbers

Acetone (67-64-1)

RCRA: waste number U002 (Ignitable waste)

Material Safety Data Sheet

Material Name: Quilon M - Chromium Complex

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations.
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Flammable Liquid, N.O.S. (Isopropanol and Acetone)
UN/NA #: 1993 Hazard Class: 2 Packing Group: II

*** Section 15 - Regulatory Information ***

US Federal Regulations

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Isopropyl alcohol (67-63-0)

SARA 313: 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

Acetone (67-64-1)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Isopropyl alcohol	67-63-0	Yes	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes	Yes

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Isopropyl alcohol	67-63-0	1 %
Acetone	67-64-1	1 %

Additional Regulatory Information

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Isopropyl alcohol	67-63-0	Yes	DSL	EINECS
Chromium, tetrachloro- μ -hydroxy[μ -(tetradecanoato-O:O')]di-	15659-56-0	Yes	DSL	EINECS
Acetone	67-64-1	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Material Safety Data Sheet

Material Name: Quilon M - Chromium Complex

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.