Material Safety Data Sheet

Chromium(III) Oxide, 99%, Amorphous Powder

ACC# 00453

Section 1 - Chemical Product and Company Identification

MSDS Name: Chromium(III) Oxide, 99%, Amorphous Powder

Catalog Numbers: AC192080000, AC192085000 Synonyms: Chrome Oxide; Green Chrome Oxide

Company Identification: Acros Organics N.V. One Reagent Lane Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01 For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	cent EINECS/ELINCS	
1308-38-9	Chromimium (III) Oxide	100	215-160-9	

Hazard Symbols: None listed. Risk Phrases: None listed.

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: green solid. May cause eye and skin irritation. May cause allergic skin reaction. May cause respiratory and digestive tract irritation. May cause cancer based on animal studies. Cancer suspect agent. Hygroscopic (absorbs moisture from the air). Oxidizer.

Danger!

Target Organs: Lungs.

Potential Health Effects

Eye: May cause mild eye irritation. Skin: May cause mild skin irritation.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation.

Inhalation: May cause respiratory tract irritation.

Chronic: Prolonged or repeated skin contact may cause sensitization dermatitis and possible destruction and/or ulceration. Repeated

inhalation may cause chronic bronchitis. May cause cancer according to animal studies.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear.

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. Substance is noncombustible. Oxidizer. Greatly increases the burning rate of combustible materials. Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

Flash Point: Not available.

Autoignition Temperature: Not available. Explosion Limits, Lower: Not available.

Upper: Not available. NFPA Rating: Not published.

Section 6 - Accidental Release Measures

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

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use only in a well-ventilated area. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage: Do not store near combustible materials. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Chromimium (III) Oxide	none listed	none listed	none listed

OSHA Vacated PELs: Chromimium (III) Oxide: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid Appearance: green Odor: Odorless. pH: Not available.

Vapor Pressure: Not applicable. Vapor Density: Not applicable. Evaporation Rate: Not available.

Viscosity: Not available.

Roiling Point: 4000 deg

Boiling Point: 4000 deg C @ 760.00mmHg **Freezing/Melting Point:**2435 deg C **Decomposition Temperature:**Not available.

Solubility: insoluble

Specific Gravity/Density:5.2100g/cm3

Molecular Formula:Cr2O3 Molecular Weight:151.99

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Combustible materials

 $\textbf{Incompatibilities with Other Materials:} \ \textbf{Chlorine trifluoride, glycerol, lithium, rubidium acetylide, and oxygen difluoride.}$

Hazardous Decomposition Products: None.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 1308-38-9: GB6475000

LD50/LC50: Not available.

Carcinogenicity: CAS# 1308-38-9:

ACGIH: A4 - Not Classifiable as a Human Carcinogen (listed as Chromium).

IARC: IARC Group 3 - not classifiable (listed as Chromium).

Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: No data available.
Neurotoxicity: No data available.

Mutagenicity: Hamster, lung cell: 34 mg/L caused sister chromatid exchange.

Other Studies: No data available.

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to 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:	No information available.				No information available.
Hazard Class:					
UN Number:					
Packing Group:					

Section 15 - Regulatory Information

US FEDERAL

TSC₄

CAS# 1308-38-9 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

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 1308-38-9: acute, chronic.

Section 313

This material contains Chromimium (III) Oxide (listed as Chromium), 100%, (CAS# 1308-38-9) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 1308-38-9 can be found on the following state right to know lists: New Jersey, Massachusetts.

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:

Not available.

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 1308-38-9: 1

Canada - DSL/NDSL

CAS# 1308-38-9 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2A.

Canadian Ingredient Disclosure List

CAS# 1308-38-9 is listed on the Canadian Ingredient Disclosure List.

Exposure Limits

CAS# 1308-38-9 (listed as chromium): OEL-ARAB Republic of Egypt:TWA 0. 05 mg/m3 OEL-AUSTRALIA:TWA 0.05 mg/m3 OEL-BELGIUM:TWA 0.5 mg/m3 OEL-DENMARK:TWA 0.5 mg/m3 OEL-FINLAND:TWA 0.01 mg/m3 OEL-FRANCE:TWA 0.5 mg/m3 OEL-JAPAN:TWA 0.5 mg/m3 OEL-THE NETHERLANDS:TWA 0.5 mg/m3 OEL-THE PHILIPPINES:TWA 1 mg/m3 OEL-SWEDEN:TWA 0.5 mg/m3 OEL-UNITED KI NGDOM:TWA 0.5 mg/m3 OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA CHECK AC GIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 11/21/1997 **Revision #3 Date:** 3/18/2003

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