

Material Safety Data Sheet

Product Trade Name: CHROMAX 4200A

ID: 232514

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

Product Trade Name: CHROMAX 4200A

Manufacturer Information

Henkel Surface Technologies
32100 Stephenson Highway
Madison Heights, MI 48071

Contact Phone: (248) 583-9300

Chemtrec Emergency # (800) 424-9300

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Component	Percent
64-19-7	Acetic acid	10-30
1333-82-0	Chromium trioxide (CrO3)	10-30
10588-01-9	Sodium dichromate	10-30

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Chromium (VI) compounds- water soluble.

Additional Information:

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

*** Section 3 - Hazards Identification ***

Emergency Overview:

DANGER -- CORROSIVE! Contact with this material will cause burns to the skin, eyes and mucous membranes. Prolonged or repeated breathing may cause ulceration of nasal membranes. Cancer hazard.

Eye Contact:

Contact with the eyes can cause severe burns and permanent eye damage.

Skin Contact:

Corrosive to the skin. Contact with the skin or mucous membranes may cause severe irritation and burns. Following skin exposure to this product, the sensation of irritation or pain may be delayed. Contact with broken skin may lead to formation of firmly marginated "chrome sores". Product contains chromium, which may cause an allergic skin sensitization reaction.

Skin Absorption:

A component in this product may be harmful or fatal if absorbed through the skin, especially if skin is damaged.

Ingestion:

This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Inhalation:

Inhalation of mists of this product may cause severe irritation and burns to the respiratory tract. Nasal itch and soreness, perforation of the nasal septum, dental erosion, and chronic asthmatic bronchitis may result from repeated exposure.

Medical Conditions Aggravated by Exposure:

Pre-existing eye, skin and respiratory disorders. Preexisting liver and kidney disorders.

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

Eye Contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

Skin Contact:

For skin contact, flush with large amounts of water. Seek immediate medical attention.

Material Safety Data Sheet

Product Trade Name: CHROMAX 4200A

ID: 232514

Ingestion:

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Inhalation:

If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.

First Aid: Notes to Physician

No information available for the product.

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

Flash Point: >212°F

Method Used: Calculated

Flammability Classification: Non-flammable

Upper Flammable Limit (UFL): Not applicable

Lower Flammable Limit (LFL): Not applicable

Fire & Explosion Hazards:

May react with metals to form flammable hydrogen gas.

Decomposition Products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Decomposition of this product may emit oxides of nitrogen.

Extinguishing Media:

Use any media suitable for the surrounding fires.

Fire-Fighting Instructions:

Firefighters should wear full protective clothing including self contained breathing apparatus.

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

Containment Procedures:

Stop the flow of material, if this is without risk. Wear appropriate protective equipment and clothing during clean-up.

Clean-Up Procedures:

Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of collected material according to regulation.

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

Handling Procedures:

Do not get this material in your eyes, on your skin, or on your clothing. Do not inhale vapors or mists of this product. Wash thoroughly after handling. Do not take internally. For industrial use only. Use this product with adequate ventilation.

Storage Procedures:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Thaw and mix thoroughly if frozen. Manufacturer recommends storing above 40 °F.

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

Exposure Guidelines:

A: General Product Information

Follow all applicable exposure limits.

B: Component Exposure Limits

Material Safety Data Sheet

Product Trade Name: CHROMAX 4200A

ID: 232514

Acetic acid (64-19-7)

ACGIH: 10 ppm TWA; 25 mg/m³ TWA
15 ppm STEL; 37 mg/m³ STEL
OSHA: 10 ppm TWA; 25 mg/m³ TWA
NIOSH: 10 ppm TWA; 25 mg/m³ TWA
15 ppm STEL; 37 mg/m³ STEL

Sodium dichromate (10588-01-9)

ACGIH: 0.05 mg/m³ TWA (related to Chromium (VI) compounds- water soluble)

Chromium trioxide (CrO₃) (1333-82-0)

NIOSH: as CrO₃: 0.001 mg/m³ TWA; NIOSH Potential Occupational Carcinogen - see Appendix A; see Appendix C for supplementary exposure limits

Engineering Controls:

Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face Protective Equipment:

Wear chemical goggles; face shield (if splashing is possible).

Skin Protection:

Use impervious gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

Respiratory Protection:

If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Personal Protective Equipment:

Eyewash fountains and emergency showers are required.

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

Physical State:	Liquid	Appearance:	Brown
Odor:	Sharp acid	Vapor Pressure:	Not determined
Vapor Density:	Not determined	Boiling Point:	212°F (100°C)
Specific Gravity:	1.240 @25°C (103°F)	pH:	<2
Viscosity:	Not determined	VOC:	10.3 lbs/gal
Solubility Water:	Complete	Evaporation Rate:	Not determined
Percent Volatile:	Not applicable	Percent Solids:	55

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

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

None expected.

Incompatibility:

Avoid contact with organic materials, oils, greases, and any oxidizable materials. This material will react with glass, concrete, certain metals, silica containing materials, rubber, leather, and many organics. This product may react with strong alkalis.

Decomposition Products:

Decomposes with heat to produce oxides of nitrogen. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Hazardous Polymerization:

Will not occur.

Material Safety Data Sheet

Product Trade Name: CHROMAX 4200A

ID: 232514

*** Section 11 - Toxicological Information ***

Acute Toxicity:

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Acetic acid (64-19-7)

Inhalation LC50 Mouse : 5620 ppm/1H

Oral LD50 Rat : 3310 mg/kg

Dermal LD50 Rabbit : 1060 uL/kg

Sodium dichromate (10588-01-9)

Oral LD50 Rat : 50 mg/kg

Chromium trioxide (CrO3) (1333-82-0)

Oral LD50 Rat : 80 mg/kg

Oral LD50 Mouse : 127 mg/kg

Carcinogenicity:

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Sodium dichromate (10588-01-9)

ACGIH: A1-confirmed human carcinogen (related to Chromium (VI) compounds- water soluble)

NTP: Known Carcinogen; **Data from experimental animals ONLY** (under Chromium and Certain Chromium Compounds) (Select Carcinogen)

Chromium trioxide (CrO3) (1333-82-0)

NIOSH: occupational carcinogen

NTP: Known Carcinogen; **Data from experimental animals ONLY** (under Chromium and Certain Chromium Compounds) (Select Carcinogen)

Chronic Toxicity

No information available for the product.

Chromium III, the naturally occurring form, has low toxicity while chromium VI is highly toxic due to strong oxidation characteristics and permeability through biological membranes. Excessive exposure to chromium VI can produce allergic skin sensitization reactions and severe nasal irritation, scarring and damage to the lungs, liver and kidney damage.

Epidemiology:

No information available for the product.

Neurotoxicity:

No information available for the product.

Mutagenicity:

No information available for the product.

Teratogenicity:

No information available for the product.

Other Toxicological Information:

None available.

*** Section 12 - Ecological Information ***

Ecotoxicity:

A: General Product Information

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Material Safety Data Sheet

Product Trade Name: CHROMAX 4200A

ID: 232514

Acetic acid (64-19-7)

Test & Species		Conditions
LC50 (96 hr) fathead minnow	88 mg/L.	Static, 18-22 °C.
LC50 (96 hr) bluegill sunfish	75 mg/L.	
LC50 (24 hr) goldfish	423 mg/L.	
EC50 (24-48 hr) water flea	32-47 mg/L.	
EC50 (5, 15, 25 min) Photobacterium phosphoreum	8.86-11 mg/L Microtox test.	15 °C.

Sodium dichromate (10588-01-9)

Test & Species		Conditions
LC50 (96 hr) fathead minnow	33.2 mg/L.	Flow-through, 235 mg/L CaCO ₃ .
LC50 (96 hr) rainbow trout	69 mg/L.	Flow-through, 45 mg/L CaCO ₃ .
LC50 (96 hr) bluegill	213 mg/L.	Static, 120 mg/L CaCO ₃ .

Environmental Fate:

No data available for this product.

*** Section 13 - Disposal Considerations ***

US EPA Waste Numbers & Descriptions:

A: General Product Information

This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002). Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions:

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Please refer to the container label for transportation information.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

No additional information available.

B: 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).

Acetic acid (64-19-7)

CERCLA: final RQ = 5000 pounds (2270 kg)

Sodium dichromate (10588-01-9)

CERCLA: final RQ = 10 pounds (4.54 kg)

SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactive: No

State Regulations

A: General Product Information

No additional information available.

B: Component Analysis - State

Material Safety Data Sheet

Product Trade Name: CHROMAX 4200A

ID: 232514

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

Component	CAS #	CA	FL	MA	MN	NJ	PA
Acetic acid	64-19-7	Yes	Yes	Yes	Yes	Yes	Yes
Sodium dichromate (* related to Chromium (VI))	10588-01-9	Yes	Yes	Yes	Yes*	Yes	Yes
Chromium trioxide (CrO3)	1333-82-0	No	Yes	Yes	No	Yes	Yes

Other Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Acetic acid	64-19-7	Yes	Yes	Yes
Sodium dichromate	10588-01-9	Yes	Yes	Yes
Chromium trioxide (CrO3)	1333-82-0	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

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

Component	CAS #	Minimum Concentration
Acetic acid	64-19-7	1% item 6 (51)
Sodium dichromate	10588-01-9	1% item 1436 (688)
Chromium trioxide (CrO3)	1333-82-0	0.1% item 401 (1305)

*** Section 16 - Other Information ***

NFPA Ratings: Health: 3 Fire: 0 Reactivity: 0 Other:

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

HMIS Ratings: Health: 3* Fire: 0 Reactivity: 0 Pers. Prot.:

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

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; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Henkel Surface Technologies bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

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This is the end of MSDS # 232514