

Material Safety Data Sheet

Material Name: ALODINE® 1001

ID: 235107

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

Product Trade Name ALODINE® 1001

Manufacturer Information

Henkel Surface Technologies
Henkel Corporation
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
Not Available	Fluoride compound	<1
7738-94-5	Chromic acid	<1

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Chromium (VI) compounds- water soluble, (RR-00026-0), (18540-29-9), Fluorides (16984-48-8).

*** Section 3 - Hazards Identification ***

Emergency Overview:

WARNING! This product may be severely irritating to the eyes. Cancer Hazard. Contains material which can cause cancer. This product may cause irritation to the skin.

Eye Contact:

This product may be severely irritating to the eyes.

Skin Contact:

This product may cause irritation to the skin. Product contains chromium, which may cause an allergic skin sensitization reaction. Liquid or vapor can cause fluoride-type irritation or burns which may not be immediately painful or visible.

Skin Absorption:

A component in this product may be absorbed through the skin in harmful amounts.

Ingestion:

This product may be harmful if it is swallowed.

Inhalation:

Inhalation of mists of this product may cause severe irritation and burns to the respiratory tract. Prolonged or repeated breathing may cause ulceration of nasal membranes.

Medical Conditions Aggravated by Exposure:

Pre-existing eye, skin and respiratory 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:

Immediately take off all contaminated clothing. Flush with large amounts of water. Soak the affected area for one hour in an iced solution (0.13%) of Zephiran chloride (30 cc of 17% concentrate per gallon of iced distilled water.) GET MEDICAL ATTENTION IMMEDIATELY.

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.

Material Safety Data Sheet

Material Name: ALODINE® 1001

ID: 235107

Inhalation:

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

First Aid: Notes to Physician

Treatment of hypocalcemia associated with fluoride exposure may be corrected by intravenous calcium gluconate or calcium chloride. Treatment of hypomagnesemia may be corrected by intravenous magnesium sulfate.

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

Flash Point: Not applicable

Method Used: Not applicable

Flammability Classification: Non-flammable

Upper Flammable Limit (UFL): Not applicable

Lower Flammable Limit (LFL): Not applicable

Fire & Explosion Hazards:

If evaporated to dryness, solid residue is an oxidizing agent and may cause spontaneous ignition of combustible materials.

Decomposition Products:

Irritating and toxic gases or fumes may be released during a fire.

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. For industrial use only. Clothing or other material wet with this product and allowed to dry may become flammable.

Storage Procedures:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials.

Protect from freezing.

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

Exposure Guidelines:

A: General Product Information

Follow all applicable exposure limits.

B: Component Exposure Limits

Chronic acid (7738-94-5)

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

OSHA: 0.1 mg/m³ Ceiling (and chromates)

Material Safety Data Sheet

Material Name: ALODINE® 1001

ID: 235107

Fluoride compound (Not Available)

OSHA: 2.5 mg/m3 TWA (as F) (related to Fluoride)

Engineering Controls:

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

PERSONAL PROTECTIVE EQUIPMENT

As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1910.132), employers must perform a Hazard Assessment of all workplaces to determine the need for, and selection of, proper protective equipment for each task performed.

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 dust, appropriate NIOSH/MSHA respiratory protection must be provided.

Work Practices:

Eye wash fountain and emergency showers are recommended.

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

Physical State:	Liquid	Appearance:	Clear red
Odor:	None	Vapor Pressure:	Not applicable
Vapor Density:	Not applicable	Boiling Point:	212 ° F (100 ° C)
Specific Gravity:	1.0-1.1	pH:	2 - 3
Viscosity:	Not applicable	VOC:	Not applicable
Solubility Water:	Complete	Evaporation Rate:	Not determined
Percent Volatile:	Not applicable	Percent Solids:	Not applicable

*** 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 product may react with strong alkalis.

Decomposition Products:

May liberate hydrogen fluoride.

Hazardous Polymerization:

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Toxicity:

A: General Product Information

No additional information available.

B: Component Analysis - LD50/LC50

No LD50/LC50's are available for this product's components.

Material Safety Data Sheet

Material Name: ALODINE® 1001

ID: 235107

Carcinogenicity:

A: General Product Information

No additional information available. Industrial exposure to chromium may cause dermatitis, skin ulcers, perforation of the nasal septum, as well as cancers of the lungs, nasal cavity and paranasal sinuses.

B: Component Carcinogenicity

Chromic acid (7738-94-5)

ACGIH: A1 - Confirmed Human Carcinogen (related to Chromium (VI) water soluble compounds)

Fluoride compound (Not Available)

ACGIH: A4 - Not Classifiable as a Human Carcinogen (as F) (related to Fluorides)

Chronic Toxicity

Contains fluorides. Exposure to fluorides over years may cause fluorosis. Contact with broken skin may lead to formation of firmly marginated "chrome sores". Prolonged or repeated breathing may cause ulceration of nasal membranes.

Epidemiology:

No information available for the product.

Neurotoxicity:

No information available for the product.

Mutagenicity:

No information available for the product. Chromium VI compounds have been mutagenic in bacteria, caused chromosome aberrations in mammalian cells and have been associated with increased frequencies of chromosome aberrations in lymphocytes in chromate workers.

Teratogenicity:

No information available for the product. Chromium VI compounds have caused birth defects and affected fertility in laboratory animals.

Other Toxicological Information:

None available.

* * * Section 12 - Ecological Information * * *

Ecotoxicity:

A: General Product Information

No information available.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

Environmental Fate:

No data is available concerning the environmental fate, biodegradation or bioconcentration for this product.

* * * Section 13 - Disposal Considerations * * *

US EPA Waste Numbers & Descriptions:

A: General Product Information

This product contains chromium which is a hazardous waste (D007).

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.

Material Safety Data Sheet

Material Name: ALODINE® 1001

ID: 235107

14-TRN-01

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

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

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).

Chromic acid (7738-94-5)

CERCLA: 10 lb final RQ; 4.54 kg final RQ

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

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

Component	CAS #	CA	FL	MA	MN	NJ	PA
Chromic acid	7738-94-5	No	No	Yes	Yes	Yes	Yes
Fluoride compound (*related to Fluoride) (*related to Fluorides)	Not Available	Yes ¹	No	No	Yes ²	No	Yes ²

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
Chromic acid	7738-94-5	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

*** Section 16 - Other Information ***

NFPA Ratings: Health: 2 Fire: 0 Reactivity: 0

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

HMIS Ratings: Health: 2* Fire: 0 Reactivity: 0

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.

Material Safety Data Sheet

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ID: 235107

Contact: Regulatory Affairs and Product Acceptance

Contact Phone: (248) 583-9300

This is the end of MSDS # 235107