

HENKEL SURFACE TECHNOLOGIES -- ALODINE 1201 -- 8030-00-065-0957
===== Product Identification =====

Product ID:ALODINE 1201
MSDS Date:07/06/1998
FSC:8030
NIIN:00-065-0957
Status Code:A
MSDS Number: CLQYG
=== Responsible Party ===
Company Name:HENKEL SURFACE TECHNOLOGIES
Address:32100 STEPHENSON HWY
City:MADISON HEIGHTS
State:MI
ZIP:48071
Country:US
Info Phone Num:248-583-9300
Emergency Phone Num:(
800)424-9300
Preparer's Name:HENRY SIMMONS
Chemtrec Ind/Phone:(800)424-9300
CAGE:1N6B3

=== Contractor Identification ===
Company Name:HENKEL SURFACE TECHNOLOGIES
Address:32100 STEPHENSON HWY
Box:City:MADISON HEIGHTS
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===== Composition/Information on Ingredients =====

Ingred Name:POTASSIUM FERRICYANIDE
CAS:13746-66-2
RTECS #:LJ8225000
< Wt:1.

Ingred Name:CHROMIC(VI) ACID
CAS:7738-94-5
RTECS #:GB2450000
< Wt:1.
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SHA PEL:SEE TABLE Z-2
ACGIH TLV:0.05 MG/M3
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:HYDROGEN FLUORIDE
CAS:7664-39-3
RTECS #:MW7875000
< Wt:1.
OSHA PEL:SEE TABLE Z-2
ACGIH STEL:C2.6 MG/M3;C3 PPM
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

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===== Hazards Identification =====

Health Hazards Acute and Chronic:DANGER! CORROSIVE! CONTACT WITH THIS MATERIAL WILL CAUSE BURNS TO THE SKIN, EYES AND MUCOUS MEMBRANES. MAY CAUSE BLINDNESS. CONTACT WITH BROKEN SKIN MAY RESULT IN ULCERS. PROLONGED OR REPEATED BREATHING MAY CAUSE ULCERATION OF NASAL MEMBRANES. FOLLOWING SKIN EXPOSURE TO THIS PRODUCT, THE SENSATION OF IRRITATION OR PAIN MAY BE DELAYED. CANCER HAZARD.
Effects of Overexposure:EYE CONTACT-THIS PRODUCT IS SEVERELY IRRITATING TO THE EYES AND MAY CAUSE IRREVERSIBLE DAMAGE INCLUDING BURNS AND BLINDNESS. SKIN CONTACT-CONTACT WITH BROKEN SKIN MAY LEAD TO FORMATION OF FIRMLY MARGINATED CHROME SORE. PRODUCT CONTAINS CHROMIUM, WHICH MAY CAUSE AN ALLERGIC SKIN SENSITIZATION REACTION. MASSIVE OVEREXPOSURES MAY LEAD TO KIDNEY FAILURE AND DEATH. FOLLOWING SKIN EXPOSURE TO THIS PRODUCT, THE SENSATION OF IRRITATION OR PAIN MAY BE DELAYED. INGESTION: THIS PRODUCT MAY PRODUCE CORROSIVE DAMAGE TO THE GASTROINTESTINAL TRACT IF IT SWALLOWED.
Medical Cond Aggravated by Exposure:PRE-EXISTING EYE, SKIN AND RESPIRATORY DISORDERS.

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===== First Aid Measures =====
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First Aid:EYE CONTACT IN CASE OF CONTACT WITH THE EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER FOR 15 MINUTES. AND SEEK IMMEDIATE ATTENTION. SKIN CONTACT- IMMEDIATELY TAKE OFF ALL CONTAMINATED CLOTHING. FOR SKIN CONTACT. FLUSH WITH LARGE AMOUNTS OF WATER. SEEK IMMEDIATE MEDICAL ATTENTION. IF IRRITATION PERSISTS, REPEAT FLUSHING AND GET MEDICAL ATTENTION. INGESTION-IF THE MATERIAL IS SWALLOWED, GET IMMEDIATE MEDICAL ATTENTION OR ADVICE. DO NOT INDUCE VOMITING.

INHALATION-IF MIST OF VAPOR OF THIS PRODUCT IS
INHALED. REMOVE IMMEDIATELY TO FRESH AIR. SEEK MEDICAL ATTENTION IF
SYMPTOMS DEVELOP OR PERSIST.

===== Fire Fighting Measures =====

Extinguishing Media:USE ANY MEDIA SUITABLE FOR SURROUNDING FIRES.

Fire Fighting Procedures:FIREFIGHTER SHOULD WEAR FULL PROTECTIVE
CLOTHING INCLUDING SELF CONTAINED BREATHING APPARATUS

Unusual Fire/Explosion Hazard:IF EVAPORATED TO DRYNESS, SOLID RESIDUE IS
AN OXIDIZING
AGENT AND MAY CAUSE SPONTANEOUS IGNITION OF COMBUSTION
MATERIALS.

===== Accidental Release Measures =====

Spill Release Procedures:STOP THE FLOW WITH INERT MATERIAL WEAR
APPROPRIATE PROTECTIVE EQUIPMENT AND CLOTHING DURING CLEANUP.
ABSORB SPILL WITH INERT MATERIAL. SHOVEL MATERIAL INTO APPROPRIATE
CONTAINER FOR DISPOSAL. DISPOSE OF COLLECTED MATERIAL ACCORDING TO
REGULATION.

Neutralizing Agent:OCULAR EXPOSURE TO CORROSIVE FLUORIDE COMPOUNDS H
AS
BEEN TREATED WITH ISOTONIC SODIUM CHLORIDE OR MAGNESIUM CHLO

===== Handling and Storage =====

Handling and Storage Precautions:DO NOT GET THIS MATERIAL IN YOUR EYES,
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 ARE ALLOWED TO DRY MAY
BECOME FLAMMABLE.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF VENTILATION IS NOT SUFFICIENT TO EFFECTIVELY
PREVENT BUILDUP OF DUST, APPROPRIATE NIOSH/MSHA RESPIRATORY
PROTECTION MUST BE PROVIDED

Ventilation:VENTILATION SHOULD EFFECTIVELY REMOVE AND PREVENT BUILDUP
OF ANY VAPOR OR MIST GENERATED FROM THE HANDLING OF THIS PRODUCT.

Protective Gloves:USE IMPERVIOUS GLOVES.

Eye Protection:WEAR CHEMICAL GOGGLES; FACE SHIELD (IF SPLASHING IS
POSSIBLE)

Other Protective Equipment:EYE WASH FOUNTAIN AND EMERGENCY S

HOWERS ARE
RECOMMENDED.
Supplemental Safety and Health

===== Physical/Chemical Properties =====

Boiling Pt:=100.C, 212.F
Spec Gravity:1.0 -1.1
Solubility in Water:COMPLETE
Appearance and Odor:AMBER LIQUID

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
AVOID CONTACT WITH ORGANIC MATERIAL, OILS, GREASE, AND ANY OXIDIZABLE
MATERIAL. THIS PRODUCT MAY REACT WITH STRONG ALKALIES.
Stability Condition
to Avoid:NONE EXPECTED
Hazardous Decomposition Products:MAY LIBERATE HYDROGEN FLUORIDE, WHEN
HEATED TO DECOMPOSITION OR ON CONTACT WITH STRONG ACIDS POTASSIUM
FERRICYANIDE MAY EMIT FUMES OF CYANIDE.

===== Toxicological Information =====

Toxicological Information:CHROMIC ACID: RAT-ORAL-LD50 ? 80 MG/KG
POTASSIUM FERRICYANIDE RAT- ORAL ?1600 MG/KG ORAL LD50 MOUSE: 2970
MG/KG HYDROGEN FLUORIDE (7554-35-3) INHALATION LC50 MOUSE: 342
PPM/1H INHA
LATION LC50 RAT : 1276 PPM/1H HYDROGEN FLUORIDE
(7664-39-3) NOT CLASSIFY AS A HUMAN CARCINOGEN (ACGIH) CHROMIUM
ACID (7738-94-5) A1 CONFIRMED HUMAN CARCINOGEN (ACGIH) OCCUPATIONAL
CARCINOGEN (NIOSH) MONOGRAPH 49: 1 990 (IARC) MUTAGENCY: NO
INFORMATION AVAILABLE FOR THE PRODUCT. CHROMIUM VI COMPOUNDS HAVE
BEEN MUTAGENIC IN BACTERIA, CAUSED CHROMOSOME ABRATIONS CELLS AND
HEVE BEEN ASSOCIATED WITH INCREASED FREQ UENCIES OF CHROMOSOME
ABBERRATIONS.

===== Ecological Information =====

Ecological:NO DATA AVILABLE FOR THIS PRODUCT. BECAUSE OF THE LOW PH OF
THIS PRODUCT. IT WOULD BE EXPECTED TO PRODUCE SIGNIFICANT
ECOTOXICITY UPON EXPOSURE TO AQUATIC ORGANISMS AND AQUATIC SYSTEMS.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF WASTE MATERIAL ACCORDING TO LOCAL,
STATE, FEDERAL, AND PROVINCIAL ENVIRONMENTAL REGULATIONS.
NEUTRALIZE THE SPILLED MATERIAL BEFOR

E DISPOSAL.

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MSDS Transport Information
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Transport Information: DOT SHIPPING NAME: NOT DOT REGULATED. CONTAINS
CLAUSE: N/A. UN / NA NUMBER: N/A. CLASS: N/A. PACKAGING
GROUP: N/A. PRODUCT RQ (LBS): N/A. RQ CLAUSE: N/A. NOTE: RQ
INFORMATION IS BASED ON A 55-GAL CONTAINER SIZE. PLEASE REFER TO
THE PRODUCT LABEL FOR RQ ON OTHER SIZE CONTAINERS.

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Regulatory Information
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SARA Title III I

Information: THIS MATERIAL CONTAINS ONE OR MORE OF THE
FOLLOWING CHEMICALS REQUIRES 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). HYDROGEN FLUORIDE 7664-39-3, CHROMIC
ACID 7738-94-5.

Federal Regulatory Information: POTASSIUM FERRIOYANIDE 13746-66-2,
HYDROGEN FLUORIDE 7664-39-3, CHROMIC ACID 7738-94-5.

State Regulatory Information: WARNING! THIS PRODUCT CONTAINS A CHEMICAL
KNOWN TO CAUSE CANCER IN THE STATE OF CALIFORNIA

POTASSIUM FERRIOYANIDE 13746-66-2. HYDROGEN FLUORIDE 7664-38-3. CHROMIC ACID.
7738-94-5.

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Other Information
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Disclaimer (provided with this information by the compiling agencies):
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assume responsibility for the suitability of this information to their
particular situation.