

RALRUBE INC. -- ALODINE 1201 -- 8030-00-065-0957

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Product Identification  
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Product ID:ALODINE 1201  
MSDS Date:08/16/1998  
FSC:8030  
NIIN:00-065-0957  
Status Code:A  
MSDS Number: CLMFS  
=== Responsible Party ===  
Company Name:RALRUBE INC.  
Address:36977 FOX GLEN  
City:FARMINGTON HILLS  
State:MI  
ZIP:48331  
Country:US  
Info Phone Num:248-661-0260, FAX 248-661-3941  
Emergency Phone Num:248-661-0260  
Resp.  
Party Other MSDS Num.:CODE: 235110  
CAGE:6X798  
=== Contractor Identification ===  
Company Name:RALRUBE INC.  
Address:36977 FOX GLEN  
Box:City:FARMINGTON HILLS  
State:MI  
ZIP:48331  
Country:US  
Phone:248-661-0260, FAX 248-661-3941  
CAGE:6X798

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Composition/Information on Ingredients  
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Ingred Name:HYDROFLUORIC ACID  
CAS:7664-39-3  
RTECS #:MW7875000  
&lt; Wt:1.  
OSHA PEL:C 3 PPM AS F  
OSHA STEL:6 PPM  
ACGIH TLV:C 3 PPM AS F  
ACGIH STEL:C 2.6 MG/M3  
EPA Rpt Qty:100 LBS  
DOT Rpt Qty:100 LB

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Ingred Name:CHROMIC ACID  
CAS:7738-94-5  
RTECS #:GB2450000  
&lt; Wt:1.  
OSHA PEL:0.1 MG/M3  
ACGIH TLV:0.05 MG/M3  
EPA Rpt Qty:10 LBS  
DOT Rpt Qty:10 LBS

Ingred Name:POTASSIUM FERRICYANIDE  
CAS:13746-66-2  
RTECS #:LJ8225000  
&lt; Wt:1.  
OSHA PEL:NONE  
OSHA STEL:NONE  
ACGIH TLV:NONE  
ACGIH STEL:NONE

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and C

Chronic:EYES: CONTACT WITH EYES CAN CAUSE SEVERE IRRITATION. SKIN CONTACT: CONTACT WITH SKIN CAN CAUSE IRRITATION. CONTACT WITH SKIN CAN CAUSE SEVERE BURNS WHICH MAY NOT BE IMMEDIATELY PAINFUL OR VISIBLE. SKIN ABSORPTION: CHROMIC ACID MAY BE ABSORBED THROUGH SKIN, ESPECIALLY IF SKIN IS DAMAGED. FATAL KIDNEY DAMAGE WAS REPORTED IN A PERSON WHO EVIDENTLY ABSORBED CHROMIUM TRIOXIDE INTO THE BODY. INGESTION: NO INFORMATION AVAILABLE. INHALATION: CAN CAUSE IRRITATION OF UPPER RESPIRATORY TRACT AND ULCERATION OF MUCOUS MEMBRANES.

Explanation of Carcinogenicity:CARCINOGEN - CONTAINS CHROMIC ACID. CHROMIUM VI AND IT'S COMPOUNDS: IARC GROUP 1, VOLUME 49, PAGE 49, 1990. NTP 9TH ANNUAL REPORT KNOWN TO BE HUMAN CARCINOGENS LIST.

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===== First Aid Measures =====

First Aid:INGESTION: CONTACT A PHYSICIAN IMMEDIATELY . INHALATION: REMOVE TO FRESH AIR. SUPPORT BREATHING. CONTACT A PHYSICIAN IMMEDIATELY . EYE CON

TACT: IMMEDIATELY FLUSH EYES WITH POTABLE WATER FOR A MINIMUM OF 15 MINUTES. CONTACT A PHYSICIAN . SKIN CONTACT: FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING. CONTACT A PHYSICIAN .

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Fire Fighting Measures  
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Extinguishing Media:AS REQUIRED TO EXTINGUISH SURROUNDING FIRE.  
Fire Fighting Procedures:WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (NIOSH APPROVED - ) AND FULL PROTECTIVE CLOTHING.  
Unusual Fire/Explosion Hazard:PRESENTS NO HAZARD IN LIQUID FORM, HOWEVER CHEMICAL CONTAINS STRONG OXIDIZERS WHICH MAY SUPPLY OXYGEN WHEN DRY.

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Accidental Release Measures  
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Spill Release Procedures:WEAR PROTECTIVE CLOTHING. ABSORB OR OTHERWISE COLLECT SPILL AND STORE IN POLYETHYLENE OR POLYETHYLENE-LINED STEEL CONTAINER.

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Handling and Storage  
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Handling and Storage Precautions:DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. CLOTHING OR OTHER COMBUSTIBLE MATERIAL WET WITH THIS MATERIAL AND ALLOWED TO DRY MAY BECOME FLAMMABLE. WASH THOROUGHLY AFTER HANDLING. FOR INDUSTRIAL USE ONLY.  
Other Precautions:EMERGENCY OVERVIEW: CONTACT CAN CAUSE SEVERE EYE IRRITATION. CAN CAUSE SKIN IRRITATION. CARCINOGEN - CONTAINS CHROMIC ACID.

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Exposure Controls/Personal Protection  
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Respiratory Protection:IF VAPORS OR MIST ARE GENERATED WEAR A NIOSH APPROVED RESPIRATOR.  
Ventilation:USE WITH ADEQUATE VENTILATION. PROVIDE GENERAL AND LOCAL EXHAUST VENTILATION.  
Protective Gloves:WEAR CHEMICAL RESISTANT GLOVES SUCH AS NEOPRENE, PVC, BUTYL RUBBER.  
Eye Protection:(ANSI APPROVED - ) CHEMICAL GOGGLES OR FACE SHEILD (& SAFETY GLASSES - FPN)  
Other Protective Equipment:WEAR PROTECTIVE CLOTHING SUCH AS RUBBER APRONS, BOOTS AS NECESSARY TO AVOID SKIN CONTACT. EYE WASH FACILITY AND EMERGENCY SHOWER (MEETING ANSI DESIGN CRITERIA -

) SHOULD BE IN  
CLOSE PROXIMITY.

Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING,  
DRINKING, SMOKING OR USING TOILET. LAUNDER CONTAMINATED CLOTHES  
BEFORE REUSE .

Supplemental Safety and Health  
DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.

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

Boiling Pt:=100.C, 212.F  
Vapor Density:NOT APPLIC  
Spec Gravity:1.0 - 1.1  
pH:< 2  
Evaporation Rate & Reference:NOT DETERMINED  
Solubility in Water:COMPLETE  
Appearance and Odor:AMBER LIQUID; NO ODOR.  
Percent Volatiles by Volume:NOT APPLIC

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

Stability Indicator/Materials to Avoid:YES  
KEEP SEPARATE FROM ALKALIES.  
Stability Condition to Avoid:NONE.  
Hazardous Decomposition Products:CONTAINS LESS THAN 1% POTASSIUM  
FERRICYANIDE. WHEN HEATED TO DECOMPOSITION OR ON CONTACT WITH  
STRONG ACIDS POTASSIUM FERRICYANIDE CAN EMIT FUMES OF CYANIDE.

===== Toxicological Information

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Toxicological Information:CHROMIC ACID: ORAL RAT LD50: 80 MG/KG.  
POTASSIUM FERRICYANIDE: ORAL RAT LDL0: 1600 MG/KG. HYDROFLUORIC  
ACID: INHALATION LC50: 966 PPM/1 HR.

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

Ecological:NO INFORMATION AVAILABLE.

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

Waste Disposal Methods:THIS CHEMICAL CONTAINS CHROMIUM COMPOUNDS AND  
FLUORIDE COMPOUNDS. WASTE TREATMENT AND NEUTRALIZATI

ON MAY BE

REQUIRED PRIOR TO DISCHARGE TO A SEWER. DISPOSE OF IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

===== MSDS Transport Information =====

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.

===== Regulatory Information =====

SARA Title III Information: SEC 302 EHS: HYDROFLUORIC ACID - YES,  
CHROMIC ACID - NO, POTASSIUM FERRICYANIDE - NO. SEC 313 LIST:  
HYDROFLUORIC ACID - YES, CHROMIC ACID - YES, POTASSIUM FERRICYANIDE  
- NO.

Federal Regulatory Information: CERCLA LIST: HYDROFLUORIC ACID - YES,  
CHROMIC ACID - YES, POTASSIUM FERRICYANIDE - NO. COMPONENTS OF  
THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. EPA REACTIVE  
HAZARD: NO. EPA SUDDEN RELEASE OF PRESSURE: NO. FIRE HAZARD:  
NO. EPA IMMEDIATE HEALTH HAZARD: YES. EPA DELAYED HEALTH  
HAZARD: YES.

State Regulatory Information: CALIFORNIA PROPOSITION 65: WARNING: THIS  
PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO  
CAUSE CANCER.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):

This information

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