

1. IDENTIFICATION

PRODUCT NAME: DE-IRON
RECOMMENDED USE: LAUNDRY SOUR
RESTRICTIONS ON USE: DO NOT USE IN A MANNER INCONSISTENT WITH THE LABEL.
LABEL BRAND: U S CHEMICAL
SDS 100997 CODE 4329559

U S CHEMICAL 316 HART STREET WATERTOWN, WI 53094 USA
MEDICAL EMERGENCY: 1-866-923-4913 USA
SPILL EMERGENCY: 1-800-424-9300 USA
PRODUCT INFORMATION: 1-800-558-9566 USA (8 A.M. TO 5 P.M. CST MONDAY TO FRIDAY)
INTERNET ADDRESS: WWW.USCHEMICAL.COM

2. HAZARD(S) IDENTIFICATION

CLASSIFICATION: SKIN CORROSION (CATEGORY 1B), EYE DAMAGE (CATEGORY 1), CORROSIVE TO METALS (CATEGORY 1), ACUTE TOXICITY: ORAL (CATEGORY 4) ACUTE TOXICITY: DERMAL (CATEGORY 4)



LABEL ELEMENTS

SIGNAL WORD: DANGER

PICTOGRAMS: CORROSION, EXCLAMATION MARK

HAZARD STATEMENTS: CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. MAY BE CORROSIVE TO METALS. HARMFUL IF SWALLOWED. HARMFUL IN CONTACT WITH SKIN.

PRECAUTIONARY STATEMENTS: Wear chemical-splash safety goggles, chemical-resistant protective gloves and protective footwear. Avoid contact with eyes, skin and clothing. Do not breathe vapors or mists. Do not eat, drink, or smoke when using this product. Wash hands and affected areas thoroughly after handling. Absorb spillage to prevent material damage. Mix only with water. Do not mix with ammonia, bleach or other chlorinated compounds. Can react to release hazardous gases.

FIRST AID: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. **IF ON SKIN (OR HAIR):** Take off immediately all contaminated clothing. Rinse skin with water for at least 15 minutes. Call a poison center or physician if you feel unwell. Wash contaminated clothing before reuse. **IF SWALLOWED:** Rinse mouth. **Do NOT** induce vomiting. If conscious, dilute by drinking up to a cupful of milk or water as tolerated. Call a Poison Center or physician if you feel unwell. **IF INHALED:** Remove person to fresh air and keep comfortable for breathing.

START FIRST AID. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.

EMERGENCY TELEPHONE: 1-866-923-4913

Storage: Store tightly closed only in original corrosive-resistant plastic container. Store locked up.

Disposal: Dispose of contents in accordance with all federal, state and local applicable laws and regulations.

KEEP OUT OF REACH OF CHILDREN. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

HAZARDS NOT OTHERWISE CLASSIFIED: Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT(S)	CAS #	WEIGHT %
HYDROFLUOROSILICIC ACID	16961-83-4	12.7
HYDROGEN FLUORIDE	7664-39-3	0.2
STATE RIGHT TO KNOW: SEE SECTION 15 FOR STATE RTK CHEMICAL NAMES IN MIXTURE.		

4. FIRST-AID MEASURES

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IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING FOR AT LEAST 15 MINUTES.
IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER FOR AT LEAST 15 MINUTES. CALL A POISON CENTER OR PHYSICIAN IF YOU FEEL UNWELL. WASH CONTAMINATED CLOTHING BEFORE REUSE. **IF SWALLOWED:** RINSE MOUTH. **Do NOT** INDUCE VOMITING. IF CONSCIOUS, DILUTE BY DRINKING UP TO A CUPFUL OF MILK OR WATER AS TOLERATED. CALL A POISON CENTER OR PHYSICIAN IF YOU FEEL UNWELL. **IF INHALED:** REMOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE FOR BREATHING. **START FIRST AID. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. EMERGENCY TELEPHONE: 1-866-923-4913**

MOST IMPORTANT SYMPTOMS / EFFECTS: HARMFUL IN CONTACT WITH SKIN. CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. MAY CAUSE BLINDNESS WITHOUT IMMEDIATE FIRST AID. HARMFUL IF SWALLOWED. CAUSES BURNS AND SERIOUS DAMAGE TO MOUTH, THROAT AND STOMACH. CORROSIVE TO ALL BODY TISSUES.

MEDICAL CONDITIONS AGGRAVATED: NONE KNOWN.

NOTE TO PHYSICIAN: CALL 1-866-923-4913 FOR EXPOSURE MANAGEMENT ASSISTANCE.

5. FIRE-FIGHTING MEASURES

CHEMICAL HAZARDS: CORROSIVE. NON-FLAMMABLE.

COMBUSTION PRODUCT HAZARDS: OXIDES OF CARBON AND OTHER FUMES.

METHODS: SELECT EXTINGUISHER AND METHODS BASED ON FIRE SIZE AND TYPE.

EQUIPMENT: WEAR SCBA AND FULL PROTECTIVE GEAR AS CONDITIONS WARRANT.

NFPA RATING: HEALTH-3/FLAMMABILITY-0/ INSTABILITY-0/SPECIAL HAZARD-N.AP.

SUITABLE EXTINGUISHERS: WATER, DRY CHEMICAL, CO2 OR FOAM SUITABLE FOR FIRE.

UNSUITABLE EXTINGUISHERS: NO RESTRICTIONS BASED ON CHEMICAL HAZARDS.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: EVACUATE UNPROTECTED PERSONNEL FROM AREA. WEAR PERSONAL PROTECTION INCLUDING RUBBER BOOTS. SEE SECTION 8. VENTILATE AREA IF NEEDED. BE CAREFUL NOT TO SLIP. WASH THOROUGHLY AFTER CLEAN-UP.

ENVIRONMENTAL PRECAUTIONS: PREVENT SPILL FROM ENTERING DRAIN, STORM SEWER OR SURFACE WATERWAY. PREVENT WATER AND SOIL CONTAMINATION.

CLEAN-UP METHODS: SMALL SPILLS MAY BE WIPED UP AND RINSED WITH WATER. FOR LARGER SPILLS, DIKE TO CONTAIN. PUMP TO LABELED CONTAINER OR ABSORB SPILLAGE AND SCOOP UP WITH INERT ABSORBENT MATERIAL. AFTER SPILL COLLECTION, RINSE AREA WITH WATER AND FOLLOW WITH NORMAL CLEAN-UP PROCEDURES.

7. HANDLING AND STORAGE

HANDLING: FOLLOW ALL LABEL DIRECTIONS. INSTRUCT PERSONNEL ABOUT PROPER USE, HAZARDS, PRECAUTIONS, AND FIRST AID MEASURES. AVOID INHALATION, INGESTION, AND CONTACT WITH SKIN, EYES AND CLOTHING. DO NOT TASTE OR SWALLOW. REMOVE AND WASH CONTAMINATED CLOTHING AND FOOTWEAR BEFORE REUSE. PRODUCT RESIDUE MAY REMAIN IN EMPTY CONTAINERS. HANDLE CAREFULLY TO AVOID DAMAGING CONTAINER.

STORAGE: STORE TIGHTLY CLOSED ONLY IN ORIGINAL CORROSIVE-RESISTANT PLASTIC CONTAINER. STORE LOCKED UP. STORE AT AMBIENT TEMPERATURES IN A DRY AREA OUT OF DIRECT SUNLIGHT. PROTECT FROM FREEZING. ROTATE STOCK REGULARLY. KEEP AWAY FROM FOOD AND DRINK. KEEP OUT OF REACH OF CHILDREN.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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EXPOSURE LIMITS: HYDROFLUOROSILICIC ACID = 2.5 MG/M³ TWA FLUORIDES, AS F (ACGIH/OSHA)
 HYDROGEN FLUORIDE = 0.5 PPM TWA, 2 PPM CEILING AS F (ACGIH), 3 PPM TWA AS F (OSHA)
ENGINEERING CONTROLS: NONE REQUIRED. GENERAL ROOM VENTILATION IS TYPICALLY ADEQUATE.

PERSONAL PROTECTION

EYES: SAFETY GOGGLES (INDIRECT-VENTED OR NON-VENTED) AND AN EYE-WASH STATION.
HANDS: CHEMICAL-RESISTANT PROTECTIVE GLOVES (RUBBER OR NEOPRENE).
RESPIRATORY: SUITABLE RESPIRATOR IF MISTS/VAPORS ARE NOT CONTROLLED BY VENTILATION.
FEET: RUBBER BOOTS DURING SPILL CLEAN-UP AND WHEN EXPOSURE IS POSSIBLE.
BODY: RUBBER FULL-COVER PROTECTIVE CLOTHING WHEN EXPOSURE IS POSSIBLE.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: LIGHT GREEN LIQUID
ODOR: PUNGENT
pH CONCENTRATE: BELOW 2.0 (ACIDIC)
pH @ 2500 PPM SOLUTION: N.AV.
pH @ USE DILUTION: N.AV.
PHYSICAL STATE: LIQUID
RELATIVE DENSITY (WATER): 1.110
SOLUBILITY (WATER): COMPLETE
VAPOR PRESSURE: N.AV.
VAPOR DENSITY: N. AV.
VISCOSITY: NON-VISCOUS

AUTO-IGNITION TEMPERATURE: N.AV.
DECOMPOSITION TEMPERATURE: N.AV.
EXPLOSIVE LIMITS (LEL/UEL): NONE
EVAPORATION RATE: N.AV.
FLAMMABILITY (SOLID, GAS): N.AP.
FLASH POINT: NONE
INITIAL BOILING POINT/RANGE: N.AV.
MELTING POINT/FREEZING POINT: N.AV.
ODOR THRESHOLD: N.AV.
PARTITION COEFF. (N-OCTANOL/WATER): N.AV
OTHER: N.AV.

10. STABILITY AND REACTIVITY

REACTIVITY: MIXING WITH INCOMPATIBLES CAN RELEASE HEAT + HAZARDOUS GASES.
CHEMICAL STABILITY: STABLE.
POSSIBILITY OF HAZARDOUS REACTIONS: SEE REACTIVITY. WILL NOT POLYMERIZE.
CONDITIONS TO AVOID: TEMPERATURES BELOW 35°F (1.6°C) OR ABOVE 120°F (49°C).
MATERIALS TO AVOID: BLEACH, METAL AND OTHER CLEANERS. MIX ONLY WITH WATER.
HAZARDOUS DECOMPOSITION PRODUCTS: NONE UNDER NORMAL CONDITIONS.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: EYES, SKIN, INGESTION, INHALATION.
INFORMATION ON ROUTES OF EXPOSURE: NO LC50/LD50 TEST DATA ON MIXTURE.
ACUTE EFFECTS /SYMPTOMS: CORROSIVE TO ALL BODY TISSUES.
EYES: CAUSES SERIOUS EYE DAMAGE. MAY CAUSE PAIN, REDNESS AND WATERING.
SKIN: CAUSES SEVERE SKIN BURNS. HARMFUL IN CONTACT WITH SKIN. MAY CAUSE DELAYED PAIN, REDNESS AND BLISTERING.
INGESTION: CAUSES BURNS AND SERIOUS DAMAGE TO MOUTH, THROAT AND STOMACH.
INHALATION: MAY CAUSE CORROSIVE EFFECTS TO NOSE, THROAT, AND RESPIRATORY SYSTEM.
CHRONIC / OTHER EFFECTS: NO REPORTABLE GERM CELL MUTAGENS, SKIN SENSITIZERS, RESPIRATORY SENSITIZERS, REPRODUCTIVE TOXINS OR ASPIRATION HAZARDS.
SPECIFIC TARGET ORGANS (SINGLE/REPEATED): NONE KNOWN.
NUMERICAL MEASURES OF TOXICITY: ATE_{mix} (ORAL)= 905 MG / KG,
 ATE_{mix} (DERMAL) = 1070 MG / KG, ATE_{mix} (INHALATION VAPOR) = ABOVE 50 MG / L,
 ATE_{mix} (INHALATION MIST) = 5 MG / L
CARCINOGENS: NO REPORTABLE ACGIH, IARC, NTP, OR OSHA CARCINOGENS.

12. ECOLOGICAL INFORMATION

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ECOTOXICITY / CHEMICAL FATE: NOT AVAILABLE.**13. DISPOSAL CONSIDERATIONS**

DISPOSAL METHOD: UNDILUTED PRODUCT IS REGULATED UNDER ENVIRONMENTAL AND TRANSPORTATION LAWS AS A CORROSIVE WASTE (RCRA CLASS D002). DISPOSE OF CONTENTS IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL APPLICABLE LAWS AND REGULATIONS. CONSULT STATE AND LOCAL AUTHORITIES FOR RESTRICTIONS ON DISPOSAL OF CHEMICAL WASTE. MANAGE CHEMICAL WASTES THROUGH AN APPROVED WASTE TREATMENT FACILITY. DO NOT REUSE EMPTY CONTAINER. RINSE EMPTY CONTAINER THOROUGHLY WITH WATER BEFORE DISCARDING CONTAINER IN ACCORDANCE WITH CURRENT LOCAL COMMUNITY CODES. PLEASE RECYCLE EMPTY CONTAINER WHENEVER POSSIBLE.

14. TRANSPORT INFORMATION**DOT / IMDG / TDG:** UN1778, FLUOROSILICIC ACID, 8, II**15. REGULATORY INFORMATION**

EPA CERCLA RQ: NO
EPA REGISTERED: NO
OSHA HAZARDOUS: YES
PHOSPHORUS CONTENT: 0.00%
PROPOSITION 65: NO
SARA 311/312 HAZARDS: ACUTE
SARA 313 CHEMICALS: NO
STATE RIGHT TO KNOW: WATER/7732-18-5, HYDROFLUOROSILICIC ACID/16961-83-4, HYDROGEN FLUORIDE/7664-39-3
TSCA INVENTORY STATUS: ALL COMPONENTS ARE LISTED ON THE INVENTORY.
VOC: 0.00% CALCULATION METHOD USED IS BASED ON CALIFORNIA ARB STANDARD.

16. OTHER INFORMATION

PREPARATION DATE: 6-6-14 **PREPARED BY:** RC **REVISED SECTION:** 16
ABBREVIATIONS: N.AV. = NOT AVAILABLE N.AP. = NOT APPLICABLE

NOTICE TO READER

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