

## 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
<b>STATE RIGHT TO KNOW:</b> SEE SECTION 15 FOR STATE RTK CHEMICAL NAMES IN MIXTURE.		
<b>INGREDIENT DISCLOSURE:</b> FOR MORE INGREDIENT INFORMATION VISIT <a href="http://www.uschemical.com">www.uschemical.com</a>		

#### 4. FIRST-AID MEASURES

Page 2 of 4

**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.A.P.

**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 PROTECTIVE FOOTWEAR. 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**

Page 3 of 4

**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:** GENERAL ROOM VENTILATION IS TYPICALLY ADEQUATE.

**PERSONAL PROTECTION**

**EYES:** CHEMICAL-SPLASH SAFETY GOGGLES.

**HANDS:** CHEMICAL-RESISTANT PROTECTIVE GLOVES (NITRILE, NEOPRENE OR RUBBER).

**RESPIRATORY:** NIOSH/MSHA CERTIFIED RESPIRATOR IF EXPOSURE LIMITS ARE EXCEEDED.

**FEET:** PROTECTIVE FOOTWEAR.

**BODY:** SUITABLE PROTECTIVE CLOTHING.

**HYGIENE MEASURES:** HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING AND WASH IT BEFORE REUSE. WASH HANDS AND AFFECTED AREAS THOROUGHLY AFTER HANDLING. PROVIDE SUITABLE FACILITIES FOR QUICK DRENCHING OR FLUSHING OF THE EYES AND BODY IN CASE OF CONTACT OR SPLASH HAZARD.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE:** LIGHT GREEN LIQUID

**ODOR:** NONE ADDED

**pH CONCENTRATE:** BELOW 2.0 (ACIDIC)

**pH READY-TO-USE:** N.AP.

**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:** ATEmix (ORAL)= 905 MG / KG,

ATEmix (DERMAL) = 1070 MG / KG, ATEmix (INHALATION VAPOR) = ABOVE 50 MG / L,

ATEmix (INHALATION MIST) = 5 MG / L

**CARCINOGENS:** NO REPORTABLE ACGIH, IARC, NTP, OR OSHA CARCINOGENS.

**12. ECOLOGICAL INFORMATION**

Page 4 of 4

**ECOLOGICAL INFORMATION:** OSHA WILL NOT BE ENFORCING INFORMATION REQUIREMENTS IN SECTION 12, AS THIS AREA IS NOT UNDER ITS JURISDICTION.

**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. SEE SECTION 8 FOR EXPOSURE CONTROLS/PERSONAL PROTECTION TO MINIMIZE EXPOSURE.

**14. TRANSPORT INFORMATION**

**DOT / IMDG / TDG:** UN1778, FLUOROSILICIC ACID, 8, II

**15. REGULATORY INFORMATION**

**EPA CERCLA RQ:** NO  
**EPA REGISTERED:** NO  
**OSHA HAZARDOUS:** YES. SEE SECTION 8 TO MINIMIZE EXPOSURE.  
**PHOSPHORUS CONTENT:** 0.00%  
**PROPOSITION 65:** NO  
**SARA 311/312 HAZARD CATEGORIES:** SEE SECTION 2 FOR GHS HAZARD CLASSES.  
**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.  
**USE DILUTION (1:1920):** NO PPE OR SDS REQUIRED AT PROPER USE DILUTIONS.  
**VOC:** 0.00% CALCULATION METHOD USED IS BASED ON CALIFORNIA ARB STANDARD.

**16. OTHER INFORMATION**

<b>PREPARATION DATE:</b> 2-2-24	<b>PREPARED BY:</b> RC	<b>REVISED SECTION:</b> 16
<b>ABBREVIATIONS:</b> N.AV. = NOT AVAILABLE		N.AP. = NOT APPLICABLE

**NOTICE TO READER**

THIS DOCUMENT HAS BEEN PREPARED USING DATA FROM SOURCES CONSIDERED TECHNICALLY RELIABLE. IT DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY OF THE INFORMATION CONTAINED WITHIN. ACTUAL CONDITIONS OF USE AND HANDLING ARE BEYOND SELLER'S CONTROL. USER IS RESPONSIBLE FOR EVALUATING ALL AVAILABLE INFORMATION WHEN USING PRODUCT FOR ANY PARTICULAR USE AND TO COMPLY WITH ALL FEDERAL, STATE, PROVINCIAL AND LOCAL LAWS AND REGULATIONS.