

## 1. IDENTIFICATION

**PRODUCT NAME: DETERGENT E.S.**

**RECOMMENDED USE:** MECHANICAL DISH DETERGENT

**RESTRICTIONS ON USE:** DO NOT USE IN A MANNER INCONSISTENT WITH THE LABEL.

**LABEL BRAND:** SYSTEM-1

**SDS 100418X CODE 060928**

**U S CHEMICAL** 316 HART STREET WATERTOWN, WI 53094 USA  
**U S CHEMICAL** 3755 LAIRD ROAD MISSISSAUGA, ONTARIO L5L 0B3 CANADA  
 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](http://WWW.USCHEMICAL.COM)

## 2. HAZARD(S) IDENTIFICATION

**CLASSIFICATION:** SKIN CORROSION (CATEGORY 1B), EYE DAMAGE (CATEGORY 1)  
 CORROSIVE TO METALS (CATEGORY 1), CARCINOGENICITY (CATEGORY 2)  
 ACUTE TOXICITY: ORAL (CATEGORY 4)



**LABEL ELEMENTS**

**SIGNAL WORD: DANGER**

**PICTOGRAMS:** CORROSION, HEALTH HAZARD, EXCLAMATION MARK

**HAZARD STATEMENTS:** CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE.  
 MAY BE CORROSIVE TO METALS. SUSPECTED OF CAUSING CANCER. HARMFUL IF SWALLOWED.

**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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If exposed or concerned, get medical advice. Mix only with water. Do not mix with any other product or chemical. 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. 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. **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.**

**HEALTH HAZARDS NOT OTHERWISE CLASSIFIED:** Not applicable.

**PHYSICAL HAZARDS NOT OTHERWISE CLASSIFIED:** Not applicable.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT(S)	CAS #	WEIGHT %
SODIUM HYDROXIDE	1310-73-2	13.0
TRISODIUM NITRILOTRIACETATE	5064-31-3	12.0
<b>STATE RIGHT TO KNOW: SEE SECTION 15 FOR STATE RTK CHEMICAL NAMES IN MIXTURE.</b>		

#### 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. 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. **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:** 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. SUSPECTED OF CAUSING CANCER.  
**MEDICAL CONDITIONS AGGRAVATED:** NONE KNOWN.

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

#### 5. FIRE-FIGHTING MEASURES

**CHEMICAL HAZARDS:** CORROSIVE. SUSPECTED OF CAUSING CANCER. 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:** SODIUM HYDROXIDE = 2 MG/M3 CEILING (ACGIH), 2 MG/M3 TWA (OSHA)  
TRISODIUM NITRILOTRIACETATE = 1 MG/M3 TOTAL DUST 8 HOUR TWA, CEILING 1 MG/M3  
TOTAL DUST 15 MINUTE STEL

**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:** RED LIQUID

**ODOR:** NONE ADDED

**pH CONCENTRATE:** ABOVE 13.0

**pH @ 2500 PPM SOLUTION:** N.AV.

**pH @ USE DILUTION:** N.AV.

**PHYSICAL STATE:** LIQUID

**RELATIVE DENSITY (WATER):** 1.235

**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:** ACIDS, 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. 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-RAT) = 1920 MG / KG

**CARCINOGENS:** NTA (CAS 5064-31-3) is OSHA CLASSIFIED: CARCINOGENICITY (CATEGORY 2)

**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:**

UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE), 8, II

**15. REGULATORY INFORMATION****EPA CERCLA RQ:**SODIUM HYDROXIDE = 1000 LB**EPA REGISTERED:** NO**INVENTORY STATUS (DSL/NDL - CANADA):** ALL COMPONENTS ARE LISTED.**INVENTORY STATUS (TSCA - USA):** ALL COMPONENTS ARE LISTED.**OSHA HAZARDOUS:** YES**PHOSPHORUS CONTENT:** 0.00%**PROPOSITION 65:** NTA IN PRODUCT IS LABELING EXEMPT (NSRL OR NO SIGNIFICANT RISK LEVEL).**SARA 311/312 HAZARDS:** ACUTE**SARA 313 CHEMICALS:** NO**STATE RIGHT TO KNOW:** WATER/7732-18-5, SODIUM HYDROXIDE/1310-73-2, TRISODIUM NITRILOTRIACETATE/5064-31-3,**VOC:** 0.00% CALCULATION METHOD USED IS BASED ON CALIFORNIA ARB STANDARD.**16. OTHER INFORMATION****PREPARATION DATE:** 7-7-15 **PREPARED BY:** RC**REVISED SECTION:** 16**ABBREVIATIONS:** N.AV. = NOT AVAILABLE

N.AP. = NOT APPLICABLE

**NOTICE TO READER**

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