

1. IDENTIFICATION

PRODUCT NAME: STARFIRE
RECOMMENDED USE: MECHANICAL DISH DETERGENT
RESTRICTIONS ON USE: DO NOT USE IN A MANNER INCONSISTENT WITH THE LABEL.
LABEL BRAND: SYSTEM-1
SDS 101792S CODE 060827

US 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: EYE DAMAGE(CATEGORY 1), SKIN IRRITATION (CATEGORY 2)



LABEL ELEMENTS

SIGNAL WORD: DANGER

PICTOGRAMS: CORROSION

HAZARD STATEMENTS: CAUSES SERIOUS EYE DAMAGE AND SKIN IRRITATION.

PRECAUTIONARY STATEMENTS: Wear chemical-splash safety goggles and chemical-resistant protective gloves. Avoid contact with eyes, skin and clothing. Avoid breathing dusts. Wash hands and affected areas thoroughly after handling. Mix slowly only with unheated water. Reacts exothermically on contact with water. **DO NOT MIX WITH ACIDS OR ANY OTHER CHEMICAL.** Can react to release chlorine gas. **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:** Wash with plenty of water. If skin irritation occurs, get medical attention. Take off contaminated clothing and wash it before reuse. **IF SWALLOWED:** Rinse mouth. **Do NOT** induce vomiting without medical advice. 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: Keep container tightly closed. 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 %
SODIUM CARBONATE	497-19-8	29.0
SODIUM METASILICATE	6834-92-0	14.0
SODIUM DICHLORO-S-TRIAZINETRIONE	2893-78-9	1.9

STATE RIGHT TO KNOW: SEE SECTION 15 FOR STATE RTK CHEMICAL NAMES IN MIXTURE.

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: WASH WITH PLENTY OF WATER. IF SKIN IRRITATION OCCURS, GET MEDICAL ATTENTION. TAKE OFF CONTAMINATED CLOTHING AND WASH IT BEFORE REUSE.
IF SWALLOWED: RINSE MOUTH. **Do NOT** INDUCE VOMITING WITHOUT MEDICAL ADVICE. 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 SERIOUS EYE DAMAGE AND SKIN IRRITATION. MAY CAUSE BLINDNESS WITHOUT IMMEDIATE FIRST AID. HARMFUL IF SWALLOWED.

MEDICAL CONDITIONS AGGRAVATED: NONE KNOWN.

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

5. FIRE-FIGHTING MEASURES

CHEMICAL HAZARDS: EYE CORROSIVE AND SKIN IRRITANT. 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: CAREFULLY SWEEP UP AND SHOVEL INTO DRY LABELED CONTAINERS WITHOUT RAISING DUST. MOVE CONTAINERS OUT OF SPILL AREA. AFTER SPILL COLLECTION, FLUSH 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: KEEP CONTAINER TIGHTLY CLOSED. STORE LOCKED UP. STORE AT AMBIENT TEMPERATURES IN A DRY AREA OUT OF DIRECT SUNLIGHT. 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: SODIUM CARBONATE = NONE

SODIUM METASILICATE = NONE

SODIUM DICHORO-S-TRIAZINETRIONE = 0.5 PPM TWA AS CHLORINE, 1 PPM STEL AS CHLORINE(ACGIH),
1 PPM CEILING LIMIT (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:** WEAR DUST MASK IF HANDLING CREATES AIR-BORNE DUST.**FEET:** NONE REQUIRED. RUBBER BOOTS RECOMMENDED DURING SPILL CLEAN-UP.**BODY:** NONE REQUIRED.**9. PHYSICAL AND CHEMICAL PROPERTIES****APPEARANCE:** WHITE POWDER**ODOR:** SLIGHT CHLORINE**pH CONCENTRATE:** N.AP.**pH @ 2500 PPM SOLUTION:** 11.4 (BASIC)**pH @ USE DILUTION:** N.AV.**PHYSICAL STATE:** GRANULAR POWDER**RELATIVE DENSITY (WATER):** N.AV.**SOLUBILITY (WATER):** MODERATE**VAPOR PRESSURE:** N.AV.**VAPOR DENSITY:** N. AV.**VISCOSITY:** N.AP.**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 ABOVE 120°F (49°C) AND HIGH HUMIDITY.**MATERIALS TO AVOID:** ACIDS, AMMONIA, METALS AND OTHER CHEMICALS.

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****EYES:** CAUSES SERIOUS EYE DAMAGE. MAY CAUSE PAIN, REDNESS AND WATERING.**SKIN:** CAUSES SKIN IRRITATION. MAY CAUSE DELAYED PAIN, DRYING AND REDNESS.**INGESTION:** CAUSES IRRITATION OR BURNS TO MOUTH, THROAT AND STOMACH.**INHALATION:** CAUSES IRRITATION OR BURNS TO NOSE, THROAT + 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-RAT) = ABOVE 2000 MG / KG**CARCINOGENS:** NO REPORTABLE ACGIH, IARC, NTP, OR OSHA CARCINOGENS.

12. ECOLOGICAL INFORMATION

Page 4 of 4

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

DISPOSAL METHOD: 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 / IATA / TDG:** NOT REGULATED**15. REGULATORY INFORMATION****EPA CERCLA RQ:** NO**EPA REGISTERED:** NO**OSHA HAZARDOUS:** YES**PHOSPHORUS CONTENT:** SEE LABEL**PROPOSITION 65:** NO**SARA 311/312 HAZARDS:** ACUTE**SARA 313 CHEMICALS:** NO

STATE RIGHT TO KNOW: SODIUM CARBONATE/497-19-8,
SODIUM TRIPOLYPHOSPHATE/7758-29-4, SODIUM CHLORIDE/7647-14-5,
SODIUM METASILICATE/6834-92-0, SODIUM DICHLORO-S-TRIAZINETRIONE/2893-78-9

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: 8-8-14 **PREPARED BY:** RC **REVISED SECTION:** 16
ABBREVIATIONS: 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.