



MATERIAL SAFETY DATA SHEET

SECTION 1 - MANUFACTURER OR SUPPLIER DATA

MSDS NUMBER

101941

MANUFACTURER'S NAME & MAILING ADDRESS U S Chemical Corporation 316 Hart Street Watertown, Wisconsin 53094 USA	PREPARED BY D. E. Kenas	SIGNATURE <i>David E. Kenas</i> NN
	TITLE Quality Assurance Manager	DATE 12-20-99
EMERGENCY TELEPHONE NO. (24 HOUR SERVICE) Medical Emergency ONLY: 1-800-851-7145 Ext. 075	PRODUCT INFORMATION TELEPHONE NO. (8 AM TO 5 PM CST, MON - FRI) Product Information: 1-800-558-9566	

SECTION 2 - IDENTITY OF MATERIAL

PRODUCT NAME CRYSTAL			
PRODUCT DESCRIPTION Manual Dishwashing Detergent Concentrate (Anionic Surfactants)		FORMULA Proprietary Blend	CHEMICAL FAMILY N.A.
REGULATED IDENTIFICATION	DOT PROPER SHIPPING NAME Not Regulated by D.O.T.		
	SHIPPING ID NUMBER N.A.	PACKING GROUP N.A.	HAZARD CLASS N.A.

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT N.A.	SPECIFIC GRAVITY (H ₂ O = 1) N.A.	PHYSICAL FORM Granular Powder	COLOR Light Yellow
VAPOR PRESSURE (mm Hg) N.A.	MELTING POINT N.A.	SOLUBILITY IN WATER Moderate	SCENT Lemon
VAPOR DENSITY (AIR = 1) N.A.	EVAPORATION RATE (BUTYL ACETATE = 1) N.A.	pH 2500 ppm SOLUTION 8.2	pH CONCENTRATE N.A.
OTHER N.A.			

SECTION 4 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS (CHEMICAL NAME: COMMON NAME)	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	PERCENT WT/WT
Sodium Carbonate: Soda Ash CAS Registry Number 497-19-8	Not Established	Not Established	Not Established	1.0-5.0

This product contains no other ingredient considered hazardous according to the criteria of 29 CFR 1910.1200, OSHA. However, this product contains chemicals which may be subject to reporting requirements according to the criteria of SARA Title III, 40 CFR, Part 370, Section 311 and Section 312.

STATE RIGHT TO KNOW INFORMATION

THIS PRODUCT CONTAINS: SODIUM CHLORIDE/7647-14-5, SODIUM DODECYLBENZENESULFONATE/25155-30-0, COCAMIDE MEA/68140-00-1, SODIUM CARBONATE/497-19-8, SILICA/7631-86-9

NFPA RATING: Health-1/Flammability-0/Reactivity-0 See Section 5 for Protective Equipment.
HMIS RATING: Health-2/Flammability-0/Reactivity-0 See Section 5 for Protective Equipment.

CARCINOGENICITY:

This product does not contain any known carcinogens or anticipated carcinogens according to the criteria of the NTP Annual Report on Carcinogens, IARC Monographs, and OSHA 29 CFR 1910, Subpart Z.

(CONTINUED IN SECTIONS 5 TO 8)

SECTION 5 - SAFE USAGE DATA

PROTECTIVE EQUIPMENT TYPES	EYES Safety glasses with side shields and an eye-wash station.	
	RESPIRATORY Dust mask if handling creates air-borne dust.	GLOVES Rubber or Neoprene.
	OTHER If major exposure is possible to eye/skin, wear/use appropriate protective equipment.	
VENTILATION	GENERAL MECHANICAL Satisfactory. Maintain adequate ventilation. Keep levels below recommended TLV.	
	LOCAL EXHAUST None required with normal use.	
PRECAUTIONS	HANDLING & STORAGE Follow all label directions. Instruct personnel about proper use, hazards, precautions, and first-aid measures. Avoid ingestion and contact with eyes. Rotate stock regularly. Handle carefully to avoid damaging container. Keep container closed when not in use. Recommended storage temperature below 100°F. Keep out of children's reach.	

SECTION 6 - HEALTH HAZARD DATA

EFFECTS OF EXPOSURE	INHALATION None Known.
	INGESTION May cause discomfort, nausea, vomiting, and irritation to mouth, esophagus, stomach, and to other tissues with which contact is made.
	SKIN & EYES SKIN: Typically non-irritating to intact skin. Prolonged contact may cause minor irritation. EYES: Contact may cause tearing and irritation depending upon exposure.
	ACUTE & CHRONIC ACUTE: Irritant to eyes. CHRONIC: None Known.
ROUTES OF ENTRY	INGESTION-X SKIN ABSORPTION- SKIN- EYES-X INHALATION- TARGET ORGANS None Known.

SECTION 7 - PHYSICAL HAZARD DATA

FLAMMABILITY	LEL = N.A. UEL = N.A.	FLASH POINT = N.A.	METHOD USED = N.A.
STABILITY	STABLE	X	CONDITIONS TO AVOID Avoid mixing with any other cleaning product. Mix only with water. Avoid temp. >100°F and high humidity as these conditions contribute to caking.
	UNSTABLE		HAZARDOUS DECOMPOSITION PRODUCTS None known.
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	N.A.
INCOMPATIBILITY	MATERIALS TO AVOID Strong oxidizing agents, strong acids, and strong alkali such as caustic soda or caustic potash.		

SECTION 8 - EMERGENCY RESPONSE DATA

FIRE	EXTINGUISHING MEDIA For fires in area, use appropriate media. For example: Water spray, dry chemical, carbon dioxide, or alcohol foam.
	SPECIAL PROCEDURES Evacuate area of unprotected and unnecessary personnel.
	UNUSUAL HAZARDS Not Applicable.
FIRST AID MEASURES	INGESTION: Do not induce vomiting. If patient is conscious and can swallow, administer milk or water. SKIN: Remove contaminated clothes, then flood with water. EYES: Flood with lukewarm (not hot) water poured from a large glass 2 or 3 inches from eyes. Remove contacts. Have patient blink as much as possible while flooding the eyes. Continue for 15 minutes. ADMINISTER FIRST AID TREATMENT AS STATED ABOVE, THEN CALL 1-800-851-7145 Ext. 075 OR CONTACT A PHYSICIAN FOR FURTHER MEDICAL INSTRUCTIONS.
	SPILLS STEPS TO BE TAKEN Use proper protective equipment. Carefully sweep up and shovel into dry containers without raising dust. Cover containers and move containers out of spill area. Flush area with water and follow with normal clean-up procedures.
WASTE DISPOSAL METHOD	Comply with all federal, state, and local regulations. Consult state and local authorities for restrictions on disposal of chemical waste. Please recycle empty container whenever possible.

THE DATA IN THIS MATERIAL SAFETY DATA SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND DOES NOT RELATE TO ITS USE IN COMBINATION WITH ANY OTHER MATERIAL OR PROCESS. THE DATA CONTAINED IS BELIEVED TO BE ACCURATE, HOWEVER, SINCE USE CONDITIONS VARY AND ARE OUTSIDE OUR CONTROL, THE MANUFACTURER MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, AND ASSUMES NO LIABILITY FOR FAILURE TO FOLLOW PRODUCT USE DIRECTIONS AND SAFETY PRECAUTIONS.