



MATERIAL SAFETY DATA SHEET

Copyright: 1997 Effective Date: 6/29/05 Supercedes: 10/1/04 Emergency #: 405-745-2070

SECTION I. IDENTIFICATION

PRODUCT NAME: **AQUA-CLEEN® DEGREASER ADDITIVE**

CHEMICAL NAME & SYNONYMS: Polyethoxylated tert-dodecyl sulfur compounds

PROCESSORS NAME: Chemical Products Industries, Inc., 7649 Southwest 34th Street,
Oklahoma City, OK 73179, (405/ 745-2070)

CAS #: On CAS Confidential Inventory List, Accession# 89157

CHEMICAL FAMILY: Ethoxylated mercaptan

CHEMICAL FORMULA: Confidential

SECTION II. COMPONENTS

<u>INGREDIENTS</u>	<u>CAS NUMBER</u>	<u>% BY WT</u>
-Nonionic Surface Active Agents	Confidential Inventory List	85-90%
-Water	7732-18-5	Balance

SECTION III. HEALTH HAZARDS

NFPA 704 CODES: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious and 4=Severe

<u>HEALTH (BLUE)</u>	<u>FLAMMABILITY (RED)</u>	<u>REACTIVITY (YELLOW)</u>	<u>PROTECTION</u>
NFPA: 1	NFPA: 2	NFPA: 0	NFPA: 0
HMIS: 1	HMIS: 2	HMIS: 0	HMIS: B

ACUTE EFFECTS OF OVEREXPOSURE (OSHA 1910.1200 Hazard Communication Standard):

- EYES: Irritating, similar to most soaps and hair shampoo products under test conditions used.
- SKIN: Brief exposures are not irritating.
- INHALATION: Breathing mist may cause irritation to upper respiratory tract.
- INGESTION: May cause gastrointestinal upset, weakness and sedation.

CHRONIC EFFECTS OF OVEREXPOSURE: Repeated or prolonged skin contact may produce dry skin as well as gastrointestinal upset if ingested. For further health hazard information contact Chemical Products Industries, Inc. @ 800-624-4356.

SECTION IV. FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES:

-EYES: Immediately flush with water for at least 15 minutes. If irritation persists or adverse symptoms develop, seek medical attention.

- SKIN: Wash skin with soap and water for at least 15 minutes. If irritation persists or adverse symptoms develop, seek medical attention.
- INHALATION: Remove subject to fresh air. If breathing is difficult, give oxygen. If breathing ceases, give artificial respiration followed by oxygen. Immediately seek medical attention.
- INGESTION: Give large quantities of water. Do not induce vomiting. Seek medical attention.

SECTION V. FIRE AND EXPLOSION HAZARD DATA

AQUA-CLEEN® DEGREASER ADDITIVE is an organic liquid with a flash point of 305°F. Use dry chemical, foam, water or carbon dioxide extinguishers. Vapors containing surface active agents, carbon dioxide, sulfur dioxide and unknown decomposition products may be formed. These materials should be considered irritants. Fire fighters should wear a self-contained breathing apparatus and full protective clothing. Cool closed containers with water to avoid bursting from developed pressure.

SECTION VI. SPILL, LEAK & DISPOSAL PROCEDURES

Protect from sources of heat and ignition. Evacuate area of all unnecessary personnel. Floors may be slippery. Use care to avoid falling. Contain spills immediately with inert material to prevent entry to waterways and sewers. Transfer liquids and solid diking materials to suitable containers for recovery or disposal.

SECTION VII. HANDLING AND STORAGE

No special handling is required under normal use. Avoid getting on skin, in eyes or on clothing. Avoid breathing vapors, mists of fumes. Wash hands and other contaminated areas thoroughly with soap and water after handling this product and before eating or smoking. Wash contaminated clothing thoroughly before reuse. Eye wash stations should be available to employees.

Store in well-ventilated area in a closed container. Keep away from heat, sparks and flames. Store at temperatures above freezing and below 120°F. Drain equipment and flush with water to clean.

MATERIALS TO AVOID: None known.

SECTION VIII. PERSONAL PROTECTION

Avoid skin contact by wearing impermeable gloves. If mists or vapors are generated, use NIOSH/MSHA approved respirators. Where splashing may occur wear goggles or face shield, chemical resistant clothing and rubber boots. Wash contaminated clothing before reuse.

SECTION IX. - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear, yellow liquid.
ODOR:	Like grapefruit
pH: (Typical):	3.2-4.0
BOILING POINT, 760 mm Hg (0.76 m Hg):	> 212° F
VAPOR PRESSURE, at 20°C:	< 0.1 mm Hg
SOLUBILITY IN WATER:	100%
SPECIFIC GRAVITY (H ₂ O = 1):	1.05
PERCENT VOLATILE by weight:	10-15%
VISCOSITY, CS:	5.8 centistokes @ 40°C
COD (EPA Method 410.4) (1):	1892 mg Oxygen / g
CLOUD POINT (1% aqueous):	145-175°F
FLASH POINT (Penske C.C.):	305°F

SECTION X. STABILITY AND REACTIVITY

AQUA-CLEEN® DEGREASER ADDITIVE is stable and non-reactive under normal use over a wide range of pH. The organic content reacts with oxidizers producing heat and oxidation by-products. Atomization, vaporization or

combustion forms aerosols which can carry the surface active agents and combustion products into the atmosphere. Hazardous polymerization will not occur.

SECTION XI. TOXICOLOGICAL INFORMATION

OSHA PEL and ACGIH TLV have not been established. Do not take internally. Avoid breathing mist. Non-toxic to skin contact. For further toxicological information contact Chemical Products Industries, Inc. @ 800-624-4356.

HEALTH HAZARD CATEGORIES: None of the product's ingredients are found on any list of hazardous, carcinogenic, or banned chemical agents or materials generated by them.

SECTION XII. ECOLOGICAL INFORMATION

AQUA-CLEEN® DEGREASER ADDITIVE is inherently biodegradable and non-toxic to sewage organisms at moderate dilution.

- At 20-25 PPM Aqua-Cleen® is non-inhibitory to microbes.
- At concentrations less than 10,000 ppm Aqua-Cleen® is non-toxic to sewage organisms.
- LC50, R52/53 values for Fathead minnows is 64 mg/l (.000064 kg/l) at 96 hours.

<u>Oxygen Demand (1)</u>	<u>Method</u>
BOD (5 day): 253.6 mg DO/g	EPA 405.1
BOD (20 day): 1,029 mg DO/g	EPA 405.1

(1) BOD = Biological oxygen demand; COD = Chemical oxygen demand; DO/g = Dissolved oxygen/ gram

SECTION XIII. DISPOSAL CONSIDERATIONS

Keep out of lakes, streams and water ways. Small quantities may be flushed to sanitary or industrial sewer. Disposal of large quantities should comply with all federal, state and local guidelines. Product as made does not qualify as an "Unlisted Hazardous Waste" for disposal situations.

SECTION XIV. TRANSPORT INFORMATION

PROPER DOT SHIPPING NAME:	Non Regulated
- DOT HAZARD CLASS:	Non Regulated
- DOT ID# and Packing Group	Not applicable
- EMERGENCY RESPONSE GUIDE:	Not applicable
- PRODUCT NUMBER:	International Harmonic System Code is 3402.
- MARKING:	None Required
- LABEL:	None Required
- PLACARD for bulk only:	None Required

SECTION XV. REGULATORY INFORMATION

FEDERAL REPORTING REQUIREMENTS:	
SARA Title III per 40 CFR 355 (SAME AS sara 302, 304, 311, and 312):	None
SARA Title III per 40 CFR 372 (for SARA313):	None
SARA Title III, Sec 313, Part 372	None
CERCLA per 40 CFR 302.4	None

This product is non-hazardous under the OSHA Hazard Communication Standard 29 CFR 1910-1200, and under Canadian WHMIS. All components are on the Confidential or Non-Confidential TSCA Inventory List. None have special toxic substances warning requirements.

State Right -To-Know Law hazardous substances at levels requiring listing:

California: None per Proposition 65
Massachusetts: None per the Substance List
Pennsylvania: None per the Hazardous Substance List

SECTION XVI. OTHER INFORMATION

APPROVED BY: _____
 Floyd E. Farha, Ph.D.

DATE: 6/29/05
SUPERCEDES: 10/1/04

All terms and abbreviations have been defined in various government publications, or are standard chemical terms. The data and recommendations herein are based upon our own research and the research of others, and are believed to be accurate. However no warrantee or guarantee of their accuracy is made. The product is distributed without warrantee, expressed or implied, including the limited warranties of merchantability of fitness for a particular purpose.

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