

MATERIAL SAFETY DATA SHEET

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Chemical Emergency (24 hr):
- Within U.S. & Canada (800-424-9300)
- International (703-527-3887)

Effective Date: 04/15/2006 Revised:

SECTION I - IDENTIFICATION

DANGER! MAY CAUSE SEVERE BURNS TO THE SKIN! MAY CAUSE EYE IRRITATION!
DO NOT GET IN EYES, ON SKIN, ON CLOTHING. AVOID BREATHING VAPORS AND MISTS.
KEEP CONTAINER CLOSED. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY
AFTER HANDLING.

**NAME: Hexaethylene Glycol Monodecyl Ether,
Analytical Grade (C₁₀E₆)**

CATALOG # H360

FW: 422.60 / CAS #: [5168-89-8] / MF: C₂₂H₄₆O₇

SARA HAZARD: ACUTE (SECTION 311/312).
TITLE III SECTION 313 - CONTAINS GYCOL ETHERS

SECTION II - INGREDIENTS AND HAZARD CLASSIFICATION

<u>COMPOSITION</u>	<u>%</u>	<u>PEL/TLV</u>
<u>HAZARD</u>		
POE (6) DECYL ALCOHOL (68131-39-S) 99 (CONTAINS APPROX. 2% POE (1-3) DECYL ALCOHOL)	NONE/NONE	SEE SECTION III

THIS PRODUCT MAY CONTAIN TRACE AMOUNTS OF ETHYLENE OXIDE (75-21-8),
ACETALDEHYDE (75-07-0), AND 1,4-DIOXANE (123-91-1), AND IS LISTED IN ACCORDANCE
WITH THE REGULATIONS AS SPECIFIED IN CALIFORNIA PROPOSITION 65. ETHYLENE
OXIDE IS A POTENTIAL CANCER AND REPRODUCTIVE HAZARD. 1,4-DIOXANE IS A
POTENTIAL CANCER HAZARD.

SECTION III - HEALTH INFORMATION

INHALATION: UNKNOWN

INGESTION: LD50:1-5 G/KG (RAT) (SIMILAR PRODUCTS); COMPOUNDS OF THIS TYPE MAY
CASE SERIOUS INTERNAL TISSUE DAMAGE TO THE GASTROINTESTINAL TRACT.

EYE CONTACT: CONCENTRATED SOLUTIONS OF SIMILAR ETHOXYLATED ALCOHOLS
CAUSE SEVERE EYE IRRITATION.
DRAIZE TESTING OF A 20% AQUEOUS SOLUTION OF A SIMILAR ETHOXYLATED ALCOHOL
WAS MILDLY IRRITATING TO RABBIT EYES WITHOUT WASHOUT AND NONIRRITATING WITH
WASHOUT.

EMERY MSDA

SKIN CONTACT: PRIMARY SKIN IRRITATION INDEX OF A SIMILAR ETHOXYLATED ALCOHOL
WAS 7.50 (RABBIT). 6 MG OF THE SIMILAR ETHOXYLATED ALCOHOL APPLIED TO THE SKIN
OF HUMANS OVER A PERIOD OF 3-DAYS (INTERMITTENT) RESULTED IN MODERATE
IRRITATION. 75 MG OF THE SIMILAR ETHOXYLATED ALCOHOL APPLIED TO THE SKIN OF
RABBITS OVER A 24 HOUR PERIOD RESULTED IN MILD IRRITATION. OCCLUDED PATCH
TESTS SHOW THAT ETHOXYLATED ALCOHOL WAS EXTREMELY IRRITATING AND
CORROSIVE TO THE SKIN OF RABBITS. DOT CORROSIVITY TESTS SHOW THAT THE
ETHOXYLATED ALCOHOL WAS NOT CORROSIVE BUT WAS A SEVERE IRRITANT.

SECTION IV - OCCUPATION EXPOSURE LIMITS

PEL: TWA: 1 PPM; EL (15 MIN) 5 PPM (ETHYLENE OXIDE)
TWA: 100 PPM; STEL: 150 PPM (ACETALDEHYDE)
TWA: 25 PPM (SKIN) (1,4-DIOXANE)

TLV: TWA: 1 PPM (ETHYLENE OXIDE)
TWA: 100 PPM (ACETALDEHYDE)
TWA: 25 PPM (1,4-DIOXANE)

SECTION V - EMERGENCY FIRST AID PROCEDURE

OR OVEREXPOSURE BY SWALLOWING: DO NOT INDUCE VOMITING. IF VICTIM IS
CONSCIOUS AND ABLE TO SWALLOW, PROMPTLY HAVE VICTIM DRINK WATER TO DILUTE.
DO NOT GIVE SODIUM BICARBONATE, FRUIT JUICES OR VINEGAR. NEVER GIVE ANYTHING
BY MOUTH IF THE VICTIM IS UNCONSCIOUS OR HAVING CONVULSIONS. **CALL A PHYSICIAN
OR POISON CONTROL CENTER IMMEDIATELY.**

FOR OVEREXPOSURE BY SKIN CONTACT: IMMEDIATELY FLUSH SKIN WITH PLENTY OF
WATER WHILE REMOVING CONTAMINATED CLOTHING. **GET MEDICAL ATTENTION
IMMEDIATELY.** WASH CONTAMINATED CLOTHING BEFORE REUSE.

FOR OVEREXPOSURE BY EYE CONTACT: IMMEDIATELY FLUSH EYES WITH PLENTY OF
COOL WATER FOR AT LEAST 15 MINUTES. DO NOT LET VICTIM RUB EYES. **GET MEDICAL
ATTENTION IMMEDIATELY.**

FOR OVEREXPOSURE BY INHALATION: IMMEDIATELY REMOVE VICTIM TO FRESH AIR. IF
VICTIM HAS STOPPED BREATHING GIVE ARTIFICIAL RESPIRATION, PREFERABLY BY
MOUTH-TO MOUTH. **GET MEDICAL ATTENTION IMMEDIATELY.**

SECTION VI - PHYSICAL DATA

BOILING POINT: NOT DETERMINED
MELTING POINT: LIQUID AT ROOM TEMPERATURE
VAPOR PRESSURE: NOT ESTABLISHED
SPECIFIC GRAVITY: 0.984 AT 25 DEG C
VAPOR DENSITY (AIR=1): GREATER THAN 1
SOLUBILITY IN WATER: SOLUBLE
APPEARANCE AND COLOR: COLORLESS LIQUID

SECTION VII - FIRE AND EXPLOSION HAZARDS

FLASH POINT & METHOD USED: NOT ESTABLISHED.

FLAMMABLE LIMITS IN AIR, % BY VOL. LOWER: NOT ESTABLISHED

FLAMMABLE LIMITS IN AIR, % BY VOL. UPPER: NOT ESTABLISHED

NFPA RATING: HEALTH (0) FIRE (1) REACTIVITY (0)

HMS RATING: HEALTH (3) FIRE (1) REACTIVITY (0)

SPECIAL FIRE FIGHTING PROCEDURES & PRECAUTIONS

(INDIVIDUALS SHOULD PERFORM ONLY THOSE FIRE FIGHTING PROCEDURES FOR WHICH THEY HAVE BEEN TRAINED). USE WATER SPRAY, DRY CHEMICAL, FOAM OR CARBON DIOXIDE. USE WATER TO KEEP FIRE-EXPOSED CONTAINER COOL. IF A SPILL OR LEAK HAS NOT IGNITED, USE WATER SPRAY TO DISPERSE THE VAPORS. WATER SPRAY MAY BE USED TO FLUSH SPILLS AWAY FROM FIRE TO DILUTE SPILLS TO NONFLAMMABLE MIXTURES.

UNUSUAL FIRE & EXPLOSION HAZARDS

FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS IN THE POSITIVE-PRESSURE MODE WITH A FULL FACEPIECE WHEN THERE IS A POSSIBILITY OF EXPOSURE TO SMOKE. FUMES OR HAZARDOUS DECOMPOSITION PRODUCTS.

SECTION VIII - REACTIVITY

STABILITY: GENERALLY STABLE

HAZARDOUS POLYMERIZATION: NONE LIKELY

CONDITIONS & MATERIALS TO AVOID: KEEP AWAY FROM HEAT AND FLAMES. AVOID CONTACT WITH OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS: DECOMPOSITION MAY PRODUCE OXIDES OF CARBON

SECTION IX - EMPLOYEE PROTECTION

CONTROL MEASURES: HANDLE IN THE PRESENCE OF ADEQUATE VENTILATION.

RESPIRATORY PROTECTION: WHERE EXPOSURE IS LIKELY TO EXCEED ACCEPTABLE CRITERIA (SEE SECTIONS II AND IV), USE NIOSH/OSHA APPROVED RESPIRATORY EQUIPMENT. RESPIRATORS SHOULD BE SELECTED BASED ON THE FORM AND CONCENTRATION OF CONTAMINANT IN AIR AND IN ACCORDANCE WITH OSHA (29 CFR 1910.134).

PROTECTIVE CLOTHING: WEAR GLOVES AND PROTECTIVE CLOTHING WHICH ARE IMPERVIOUS TO THE PRODUCT FOR THE DURATION OF ANTICIPATED EXPOSURE IF THERE IS POTENTIAL FOR SKIN CONTACT.

EYE PROTECTION: WEAR SAFETY GLASSES MEETING THE SPECIFICATIONS OF ANSI STANDARD Z87.1 WHERE NO CONTACT WITH THE EYE IS ANTICIPATED. CHEMICAL SAFETY GOGGLES MEETING THE SPECIFICATIONS OF ANSI STANDARD Z87.1 SHOULD BE WORN WHENEVER THERE IS THE POSSIBILITY OF SPLASHING OR OTHER CONTACT WITH THE EYES.

SECTION X - ENVIRONMENTAL PROTECTION

ENVIRONMENTAL PRECAUTIONS: AVOID UNCONTROLLED RELEASES OF THIS MATERIAL. WHERE SPILLS ARE POSSIBLE A COMPREHENSIVE SPILL RESPONSE PLAN SHOULD BE DEVELOPED AND IMPLEMENTED.

SPILL OR LEAK PRECAUTIONS: WEAR APPROPRIATE RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING AS DESCRIBED IN SECTION IX. CONTAIN SPILLED MATERIAL. TRANSFER TO SECURE CONTAINERS. WHERE NECESSARY, COLLECT USING ABSORBENT MEDIA. IN THE EVENT OF AN UNCONTROLLED RELEASE OF THE MATERIAL, THE USER SHOULD DETERMINE IF THE RELEASE IS REPORTABLE UNDER APPLICABLE LAWS AND REGULATIONS.

WASTE DISPOSAL: ALL RECOVERED MATERIAL SHOULD BE PACKAGED, LABELED, TRANSPORTED, AND DISPOSED OR RECLAIMED IN CONFORMANCE WITH APPLICABLE LAWS AND REGULATIONS AND IN CONFORMANCE WITH GOOD ENGINEERING PRACTICES. AVOID LANDFILLING OF LIQUIDS. RECLAIM WHERE POSSIBLE.

SECTION XI - REGULATORY CONTROLS

DEPARTMENT OF TRANSPORTATION: DOT CLASSIFICATION: NOT REGULATED

OTHER REGULATORY REQUIREMENTS: LISTED IN TSCA INVENTORY

SECTION XII - PRECAUTIONS: HANDLING, STORAGE AND USE

STORE IN COOL, DRY, WELL-VENTILATED AREAS AWAY FROM SUNLIGHT. STORE ONLY IN APPROVED CONTAINERS, UNDER APPROVED CONDITIONS. AN AUTOMATIC WATER SPRAY DEVICE SHOULD BE IMMEDIATELY AVAILABLE. SEGREGATE ACIDS FROM BASES. TREATMENT AGENTS FOR THE NEUTRALIZATION OF SPILLS SHOULD BE AVAILABLE AND A SPILL CONTROL AND CONTAINMENT PLAN SHOULD BE PROVIDED. STORAGE AREA SHOULD NOT BE SUBJECT TO RAPID TEMPERATURE CHANGE. SUCH CHANGES MAY CAUSE INCREASED INTERNAL PRESSURE, RAPID EXPANSION OR CONTRACTION OF METAL CONTAINERS RESULTING IN LEAKAGE. STRUCTURAL MATERIALS SHOULD BE RESISTANT TO CORROSION BY THE PRODUCT. ISOLATE FROM TOXIC MATERIALS: SUBSTANCES THAT MAY RELEASE CORROSIVE, TOXIC OR FLAMMABLE FUMES ON REACTION: ORGANIC MATERIALS: FLAMMABLE SUBSTANCES; STRUCTURAL MATERIALS SUBJECT TO CORROSION BY THIS PRODUCT. CONTAINER HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES, ALL HAZARD PRECAUTIONS DESCRIBED ON THIS MSDS MUST BE OBSERVED.

THE INFORMATION PRESENTED HEREIN IS BELIEVED TO BE FACTUAL AS IT HAS BEEN DERIVED FROM THE WORKS AND OPINIONS OF PERSONS BELIEVED TO BE QUALIFIED EXPERTS; HOWEVER, NOTHING CONTAINED IN THIS INFORMATION IS TO BE TAKEN AS A WARRANTY OR REPRESENTATION FOR WHICH ANATRACE, INC. BEARS LEGAL RESPONSIBILITY. THE USER SHOULD REVIEW ANY RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE TO DETERMINE WHETHER THEY ARE APPROPRIATE.

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