

# MATERIAL SAFETY DATA SHEET

## SECTION I

ANATRACE, INC.  
434 WEST DUSSEL DRIVE  
MAUMEE, OHIO 43537  
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Chemical Emergency (24 hr):  
- Within U.S. & Canada (800-424-9300)  
- International (703-527-3887)

Effective Date: 12/05/1997 Revised: 07/15/2004

## IDENTITY/HAZARDS

**Name:** (TRITON<sup>7</sup> X405) ANAPOE<sup>7</sup>-X-405

## CATALOG # APX405

CHEMICAL NAME: Octylphenoxyethoxyethanol Nonionic Surfactant  
CHEMICAL FAMILY: Nonionic Surfactant  
FORMULA: Not Applicable (mixture)  
MOLECULAR WEIGHT: Not Applicable (mixture)  
SYNONYMS: An alkylphenol-hydroxypolyoxyethylene  
CAS # AND NAME: See Section III ingredients

## II. PHYSICAL DATA (Determined on Typical Material)

BOILING POINT, 760 mm Hg:	101°C (215°F)
SPECIFIC GRAVITY (H <sub>2</sub> O = 1):	1.10
FREEZING POINT:	.9°C (16°F)
VAPOR PRESSURE AT 20°C:	14.65 mmHg
EVAPORATION RATE (Butyl Acetate = 1):	0.70
VAPOR DENSITY (AIR = 1):	0.70
SOLUBILITY IN WATER by wt:	100%
APPEARANCE: Colorless to transparent pale yellow	
ODOR:	Mild
PHYSICAL STATE:	Liquid
PERCENT VOLATILES (by weight):	31.0

## III. INGREDIENTS

%	MATERIAL	CAS#	EXPOSURE LIMIT
>64	Octylphenoxyethoxy-ethanol	9036-19-5	None established
<5	Polyethylene Glycol	25322-68-3	None established
<31	Water	7732-18-5	Not applicable

SKIN: Wash skin with soap and water.

INHALATION: No emergency care anticipated.

EYES: Flush eyes thoroughly with water for several minutes. Remove contact lenses if worn.

NOTES TO PHYSICIAN: Toxicology studies have shown this or similar material to be of very low acute toxicity. There is no specific antidote. Treatment of overexposure should be directed at

## IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (test method(s)): None  
Pensky-Martens Closed Cup ASTM D 93  
None  
Cleveland Open Cup ASTM D 92

FLAMMABLE LIMITS IN AIR	LOWER:	Not Determined
% by volume:	UPPER:	Not Determined

SPECIAL FIRE FIGHTING PROCEDURES: Do not direct a solid stream of water or foam into hot: burning pools; this may cause frothing and increase fire intensity. Use self-contained breathing apparatus and protective clothing.  
EXTINGUISHING MEDIA: Non-flammable (aqueous solution: After water evaporates remaining material will burn. Apply alcohol-type or all-purpose-type foam by manufacturers recommended techniques for large fires. Use water spray carbon dioxide or dry chemical media for small fires.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: This material may produce a floating fire hazard.

## V. HEALTH HAZARD DATA

EXPOSURE LIMIT(S): None established by OSHA or ACGIH.  
EFFECTS OF SINGLE OVEREXPOSURE:  
SWALLOWING: No evidence of harmful effects from available information.  
SKIN: No evidence of harmful effects from available information.  
INHALATION: Short-term harmful health effects are not expected from vapor generated at ambient temperature.  
SKIN CONTACT: No evidence of harmful effects from available information.  
EYE CONTACT: May cause mild discomfort.  
EFFECTS OF REPEATED OVEREXPOSURE: No adverse effects anticipated from available information.  
MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: A knowledge of the available toxicology information and of the physical and chemical properties of the material suggests that overexposure is unlikely so aggravate existing medical conditions.  
SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION: None currently known.  
OTHER EFFECTS OF OVEREXPOSURE: None currently known.  
EMERGENCY AID FIRST AID PROCEDURES:  
SWALLOWING: No emergency care anticipated.

the control of symptoms and the clinical condition of the patient.

## VI. REACTIVITY DATA

STABILITY: Stable  
CONDITIONS TO AVOID: Prolonged excessive heat may cause product decomposition.

INCOMPATIBILITY (material to avoid): Normally unreactive: however, avoid strong bases at high temperatures, strong acids, strong oxidizing agents and materials reactive with hydroxyl compounds.

**HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:**

Burning can produce the following products: Carbon monoxide and/or carbon dioxide. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant.

HAZARDOUS POLYMERIZATION: Will Not Occur

CONDITIONS TO AVOID: None known.

**VII. SPILL OR LEAK PROCEDURES**

STEPS TO BE TAKEN IF MATERIAL IS RELEASED- Spilled: Wear eye protection. Floor may be slippery; use care to avoid falling.

Contain spills immediately with inert materials (e.g. sand, earth). Avoid discharge to natural water. Transfer liquids and solid diking material to suitable container for recovery or disposal. To avoid gelling and foaming problems, do not use water to flush away spills.

AQUATIC EFFECTS: This material is expected to be relatively nontoxic to aquatic life (estimated 48 hr. Daphnia magna LC50-> 1000 mg/L).

WASTE DISPOSAL METHOD: Incinerate in a furnace where permitted under Federal, State, and local regulations.

**VIII. SPECIAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION (specify type): None expected to be needed. However, where misting may occur, wear a MSHA/NIOSH approved (or equivalent) half-mask air purifying respirator.

VENTILATION: General (mechanical) room ventilation is expected to be satisfactory.

PROTECTIVE GLOVES: PVC-coated

EYE PROTECTION: Safety Glasses

OTHER PROTECTIVE EQUIPMENT: Eye Bath, Safety Shower

**IX. SPECIAL PRECAUTIONS**

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

NORMAL PRECAUTIONS SHOULD BE FOLLOWED IN HANDLING, STORAGE AND USE.

FOR INDUSTRY USE ONLY

OTHER PRECAUTIONS: Surfactants can cause foaming problems in biological wastewater treatment plants and other high shear operations. This product may contain trace amounts of Ethylene Oxide (CAS No. 75-21-8), a condition which creates the potential for accumulation of ethylene oxide in the head space of shipping and storage containers and in enclosed areas where the product is being handled or used. Ethylene Oxide is listed by OSHA as probably carcinogenic to humans, ARC as carcinogenic to humans, and NTP as reasonably anticipated to be carcinogenic. OSHA considers that at excessive levels: ethylene oxide may present reproductive, mutagenic genotoxic, neurologic and sensitization hazards. If this product is handled with adequate ventilation, the presence of these trace amounts is not expected to result in any short or long term hazard. This product may not be exempt from OSHA's ethylene oxide standard. Users should comply with all applicable provisions. Personnel should be monitored to determine levels of exposure to ethylene oxide. If necessary protective measures should be taken. The OSHA permissible exposure limit for ethylene oxide is 1 ppm TWA the action level

is 0.5 ppm TWA and OSHA has established an excursion limit of 5 ppm (15 minute average).

**X. REGULATORY INFORMATION**

STATUS ON SUBSTANCE LISTS:

The concentrations shown are maximum or ceiling levels (weight %) to be used for calculations for regulations. Trade Secrets are indicated by AT'S.

FEDERAL EPA

Comprehensive Environmental Response Compensation, and Liability Act of 1980 (CERCLA)

requires notification of the National Response Center of release of quantities of Hazardous Substances equal 10 or greater than the reportable quantities (RQs) in 40 CFR 302.4.

Components present in this product at a level which could require reporting under the statute are:

UPPER BOUND		
CHEMICAL	CAS NUMBER	CONCENTRATION %
Ethylene Oxide	75-21-8	.0010
Dioxane	123-91-1	.0030

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304311 and 312).

Components present in this product at a level which could require reporting under the statute are:

\*\* NONE \* \*

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDS's that are copied and distributed for this material.

Components present in this product at a level which should require reporting under The statute are:

\*\* NONE \* \*

This bulletin is for your guidance and is based upon information and tests believed to be reliable.

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