



## MATERIAL SAFETY DATA

### 1. PRODUCT IDENTIFICATION

PRODUCT NAME: **CHAOS**  
SYNONYMS: Spreader Activator Surfactant  
CHEMICAL FAMILY: Nonionic Surfactant  
GENERIC DESCRIPTION: Low Foam Surface-Active Agent  
MOLECULAR WEIGHT: NA

### 2. HAZARDOUS INGREDIENTS

OSHA REGULATED COMPONENTS

COMPONENT	CAS. NO.	WT %	EXPOSURE LIMITS
Ethylene Oxide	75-21-8	0.6 ppm	1.0 ppm 8hr. twa

### 3. EFFECTS OF OVEREXPOSURE:

EYE: Liquid is presumed to be moderately irritating to the eyes.  
SKIN: Short and long term exposure can irritate and cause redness and swelling.  
INHALATION: Excessive vapors or mist may cause irritation to nose and throat, headache, nausea and vomiting.  
ORAL: Based on testing of a similar product, liquid is considered moderately toxic by ingestion.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Overexposure to any chemical may result in enhancement of pre-existing adverse medical condition and allergic reactions.

### 4. EMERGENCY FIRST AID

**Call a poison control center or doctor immediately for treatment advice.**

IF SWALLOWED: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye. Have the product container with you when calling a poison control center or doctor, or going for treatment.

### 5. REACTIVITY DATA

STABILITY: Stable.  
CONDITIONS TO AVOID: None.  
POLYMERIZATION: Will not occur.  
INCOMPATIBILITY: Strong oxidizing agents such as hydrogen peroxide, bromine and chromic acid.  
DECOMPOSITION: None known.

SUBJECT TO HEAT: Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning. Heating in air may produce irritating aldehydes, acids and ketones.

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## 6. PHYSICAL PROPERTIES

APPEARANCE AND ODOR: Amber / Mild Odor  
BOILING POINT: NA  
VAPOR PRESSURE (mmg of\_Hg): NA  
SPECIFIC GRAVITY: .98 (+/- .05)  
VAPOR DENSITY\_(AIR=1): >1  
% VOLATILE (BY\_WGT.%): >11  
pH OF CONCENTRATE: 5 to 7  
SOLUBILITY IN WATER: Soluble

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## 7. NFPA HAZARD RATING (National Fire Protection Association)

Fire	1	0	Reactivity	HEALTH:	Materials that must be preheated before ignition can occur.
Health	1	0	Special	REACTIVITY:	Materials which on exposure should cause irritation but only minor residual injury even if no treatment is given.
					Materials which in themselves are normally stable, even under fire exposure conditions and which are not reactive with water.

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## 8. FIRE AND EXPLOSION HAZARD INFORMATION

FLASHPOINT: >200 °F (COC)  
FLAMMABLE LIMITS: Not Available  
FIRE FIGHTING: According to NFPA guide, use water spray, dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak.  
UNUSUAL FIRE HAZARD: None

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## 9. SPECIAL PRECAUTIONS

HANDLING AND STORAGE: Empty containers can be hazardous if used to store toxic, flammable or reactive material. Do not use with aluminum equipment at temperatures above 120 °F. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container in cool storage place with closed drum bungs.  
OTHER PRECAUTIONS: Keep out of reach of children.

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## 10. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: None required for normal use.  
VENTILATION: Normal room ventilation (mechanical) should be satisfactory.  
PROTECTIVE GLOVES: Rubber gloves.  
EYE PROTECTION: Wear goggles or a face shield.  
OTHER PROTECTION: Eye wash and safety shower.

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## 11. SPILL OR LEAK PROCEDURES

SPILLS OR RELEASES: Material should be collected and disposed in proper manner. Avoid discharge to natural waters. Wear suitable protective equipment.

WASTE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Dispose of in an approved waste disposal facility in accordance with all Federal, State and Local Regulations.

CONTAINER DISPOSAL: Triple rinse (or equivalent) adding rinse water to application tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by local regulations.

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## 12. REGULATORY INFORMATION

COMPOUNDS WHICH REQUIRE REPORTING UNDER SARA TITLE III

<u>Sara regulated compounds</u>	<u>% Wt.</u>	<u>CAS NO.</u>
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No compounds present in quantities which are regulated.

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## 13. OTHER INFORMATION

WARNING! This product contains a detectable amount of ethylene oxide, which is known to the State of California to cause cancer and/or reproductive toxicity.

Ethoxylated products may contain residual amounts of ethylene oxide (EO) which can accumulate in the container headspace and be released into the ambient environment. This process is enhanced when the product is agitated, as during tank car loading and unloading, and blending operations. Ethylene oxide causes tumors in laboratory animals. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Level (PEL) for EO is 1 ppm for an eight-hour time weighted average exposure. The standard regulates occupational exposure to EO from all sources, including products containing residual EO. It is the responsibility of the employer to comply with OSHA ethylene oxide standard (29) CFR 1910.1047).

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The recommendation for safe handling and protection procedures is believed to be generally suitable for the standard uses of this compound. However, each user should identify his intended uses of this material and determine whether they are appropriate. All data included in this document is released as typical values and should not be utilized to determine the suitability of this material for a particular use or purpose. No warranty, either expressed or implied, is hereby made, nor do we give permission, inducement, or recommendations to practice any patented invention without a license. All data is offered for consideration, investigation and verification purposes only.

**UAP TIMBERLAND**  
P.O. BOX 557  
MONTICELLO, ARKANSAS

# ***UAP Distribution, Inc.***

## **CHAOS – Nonionic Surfactant**

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### **Certificate of Analysis**

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UAP Distribution, Inc.  
7251 West 4<sup>th</sup> Street  
Greeley, CO 80632

Lot Number:  
Quantity Shipped:

<b>Physical Property</b>	<b>Standard</b>	<b>Results</b>
Appearance at 25°C		Pale yellow Liquid
Specific Gravity, 25°C per ASTM Method D 891-95 (2004)	0.932 – 1.030	(generated at the time of manufacturing)
Surface Tension @ 0.25% per ASTM Method D -1331	29-34 dynes/cm	(generated at the time of manufacturing)
HLB	>13	13.1
Surfactant Content	Minimum 65% w/w	65%
% Moisture Content per Karl Fisher Method	< 12% DOT Specs. 9%-12%	10.27
Active Components	90% Specs 89%-91%	89.73 %
Defoamer System Added	Pass	Yes
Virgin Components	100%	100%

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Quality Control  
12/14/06