

# MATERIAL SAFETY DATA SHEET

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24 Hour Emergency Assistance

For emergencies involving spill, leak, fire exposure or accident, contact:

CHEMTREC 1-800-424-9300

PRODUCT NAME: Benchmark HT Foam Marking Agent

PRODUCT CODE: BMKHT01, 30, 55

## I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Benchmark HT Foam Marking Agent  
PRODUCT CODE: BMKHT01, 30, 55  
PRODUCT CLASS: Surfactant Blend  
Date Prepared: 1/12/05  
Prepared by: Safety Department

### HMIS Codes

Fire	2
Health	2
Reactivity	0
Protection	x

## II - COMPOSITION INFORMATION

Ingredient	CAS Reg. No.	OSHA Hazard	Percentage
Surfactant Blend	NA	N	77
2-butoxyethanol	111-76-2	Y	19
Ethanol	64-17-5	Y	<4
Dioxane	123-91-5	Y	0.0127
Ethylene Oxide	75-21-8	Y	0.0006

## III - HEALTH HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**Physical Appearance and Odor:** Pale Yellow Liquid/Mild Odor

**Warning Statements:** Combustible liquid, N.O.S. in limited quantities. Eye and skin irritant.

### POTENTIAL HEALTH EFFECTS

#### Acute Eye:

Irritant. Can cause redness, irritation, tearing, pain.

#### Acute Skin:

Irritant. Can cause redness, inflammation, irritation. May be harmful if absorbed through the skin. May produce symptoms similar to those from inhalation.

#### Acute Ingestion:

May be harmful if swallowed. Can cause nausea, vomiting, diarrhea

#### Acute Inhalation:

May be harmful if inhaled. Mists may cause upper respiratory tract irritation, drowsiness, depression, dizziness, headache.

#### Chronic Effects:

This product does not contain any ingredient designated by IARC, NTP, ACGIH, or OSHA as probable or suspected human carcinogens.

## IV - FIRST AID

### Eye exposure:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

### Skin exposure:

In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes before re-use.

### Inhalation:

If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

### Ingestion:

If victim is conscious and alert, give 1 to 2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention. Do not leave victim unattended.

### Antidotes:

Treat symptomatically. No specific antidote available.

### Medical Conditions Possibly Aggravated by Exposure:

Skin contact may aggravate skin disease

### Note to Physician:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

## V - FIRE-FIGHTING MEASURES

**Flashpoint:** 107° F

**Method Used:** Setaflash Closed Cup

**Flammable Limits:** Lower 1.1 Upper 19

**OSHA Flammability Class:** Re-classified as combustible liquid N.O.S., NA 1993 in limited quantities

**Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing

**Unusual Fire/Explosion Hazards:** Product will burn under fire conditions. Vapors may travel a considerable distance to a source of ignition and flash back along vapor trail. Closed containers may explode (due to build-up of pressure) when exposed to extreme heat.

**Hazardous Decomposition Materials (under fire conditions):** Oxides of sulfur, oxides of carbon, nitrogen

**Extinguishing Media:** Recommended (small fires): dry chemical, carbon dioxide. Recommended (large fires): Alcohol foam, universal foam, water spray.  
Not Recommended: water jet (frothing possible)

## VI - ACCIDENTAL RELEASE MEASURES

**EVACUATION PROCEDURES & SAFETY:** Wear appropriate protective gear for the situation. See personal protection information in Section VIII.

**EPA Hazardous Waste:** Yes

**Containment, Cleanup and Disposal of Spill:** Absorb with an inert absorbent. Sweep up and place in an appropriate closed container (see Section VII: Handling and Storage). Clean up residual material by washing area with water. Collect washings for disposal.

**Environmental and Regulatory Reporting:** Do not flush to drain. Spills may be reportable to the National response Center (800-424-8802) and to state and local agencies.

## VII - HANDLING AND STORAGE

**MINIMUM STORAGE TEMPERATURES:** 45° F (7° C)

**MAXIMUM STORAGE TEMPERATURES:** 90° F (32° C)

**Handling:** Avoid breathing vapors and mists. Avoid direct or prolonged contact with skin and eyes. DO NOT ALLOW TO FREEZE.

**Storage:** Ship and store above 40° F. Store in tightly closed containers. Store in an area that is dry, well-ventilated, away from ignition sources, away from incompatible materials (see Section X: Stability and Reactivity).

## VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL HYGIENE IS AN IMPORTANT EXPOSURE CONTROL MEASURE. THE FOLLOWING GENERAL MEASURES SHOULD BE TAKEN WHEN WORKING OR HANDLING THIS MATERIAL.

### Introductory Remarks

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

### Exposure Guidelines

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

2-BUTOXYETHANOL	Notes	TWA	ETHANOL	Notes	TWA
ACGIH		20 ppm	ACGIH		1,000 ppm
OSHA	S	25 ppm	OSHA		1,000 ppm
OSHA	S	120 mg/cu m	OSHA		1,900 mg/cu m

### Engineering Controls

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

### Respiratory Protection

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

### Eye/Face Protection

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material. Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

### Skin Protection

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

### Work Hygienic Practices

- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes of contact with this material.

## IX - PHYSICAL AND CHEMICAL PROPERTIES

**Odor:** mild odor

**Solubility in Water:** dispersible

**Melting Point Range:** NA

**Appearance:** pale yellow liquid

**Vapor Density:** NA

**Freezing Point Range:** 7° C (45° F)

**Color:** pale yellow liquid

**Vapor Pressure:** NA

**Boiling Point Range:** NA

**pH:** 6 to 7 @ 1 wt/wt %

**Specific Gravity:** > = 1 @ 25° C (77° F)

## X - STABILITY AND REACTIVITY

**Hazardous Polymerization:** Will not occur

**Stable:** Yes

Yes

**Hazardous Decomposition:** Oxides of carbon, nitrogen, sulfu

**Conditions to Avoid:** Heat, open flame, spark

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**Incompatible Materials:** Strong oxidizers, strong bases

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## XI - TOXICOLOGICAL INFORMATION

**Acute Oral, Acute Dermal, Eye Irritation, and Skin Irritation:** Not established

## XII - ECOLOGICAL INFORMATION

**Empty Container:** Since empty packaging contain residues of the product, all labeled hazard precautions should be observed. Always follow Federal, State and Local regulations regarding waste disposal.

## XIII - TRANSPORTATION INFORMATION

DOT REFER TO BILL OF LADING FOR CURRENT SHIPPING INFORMATION

## XIV - REGULATORY INFORMATION

SARA TITLE III (Superfund Amendments and Reauthorization Act)

**Fire Hazard:** Yes

**Acute Health Hazard:** Yes

**Release of Pressure:** No

**Reactive Hazard:** No

**Chronic Health Hazard:** No

## XV - OTHER INFORMATION

THE INFORMATION IN THIS MSDS IS GIVEN IN GOOD FAITH BASED ON OUR EXPERIENCE AND DATA PRESENTED IN VARIOUS TECHNICAL PUBLICATIONS. IT IS THE USERS RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF SAFETY PRECAUTIONS AS MAY BE NECESSARY. THE INFORMATION CONTAINED HEREIN IS FURNISHED WITHOUT WARRANTY OF ANY KIND.