

No data HTR/AC CLNSG FOAM

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	No data
Product code	HTR/AC CLNSG FOAM
Product Use Description	No data

**2. HAZARDS IDENTIFICATION**

**Emergency Overview**

Appearance: aerosol

CAUTION! MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL IF INHALED. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN, CAUSE IRRITATION AND BURNS.

**Potential Health Effects**

**Routes of exposure**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

**Eye contact**

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

**Skin contact**

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

**Ingestion**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

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### **Inhalation**

Breathing aerosol and/or mist is possible when material is sprayed. Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

### **Aggravated Medical Condition**

Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions), Liver, kidney

### **Symptoms**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), Shortness of breath, Lack of coordination, confusion, irregular heartbeat, irritation (nose, throat, airways), Difficulty in breathing, Bloody urine, blood abnormalities (breakage of red blood cells), kidney damage, liver damage, coma

### **Target Organs**

Acute lethal exposure to ethylene glycol monobutyl ether in animal studies has resulted in congestion of organs including kidney, spleen, and lung. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible spleen effects, blood abnormalities

### **Carcinogenicity**

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). Ethylene glycol monobutyl ether has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain.

### **Reproductive hazard**

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
BUTANE NORMAL	106-97-8	>=1.5-<5%
ETHYLENE GLYCOL	111-76-2	>=1.5-<5%
MONOBUTYL ETHER		
PROPANE	74-98-6	>=1-<1.5%

### 4. FIRST AID MEASURES

#### Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

#### Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

#### Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

#### Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

#### Notes to physician

**Hazards:** Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

**Treatment:** No information available.

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## **5. FIRE-FIGHTING MEASURES**

### **Suitable extinguishing media**

Water spray, Dry chemical, Carbon dioxide (CO<sub>2</sub>), regular foam (such as AFFF), Alcohol-resistant foam

### **Hazardous combustion products**

carbon dioxide and carbon monoxide, Hydrocarbons

### **Precautions for fire-fighting**

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions**

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

### **Environmental precautions**

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

### **Methods for cleaning up**

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

### **Other information**

Comply with all applicable federal, state, and local regulations.

## **7. HANDLING AND STORAGE**

### **Handling**

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Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

**Storage**

Store in a cool, dry, ventilated area. Maximum recommended storage temperature 50 degrees C (122 degrees F).

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

<b>BUTANE NORMAL</b>		<b>106-97-8</b>
NIOSH	Recommended exposure limit (REL):	800 ppm
NIOSH	Recommended exposure limit (REL):	1,900 mg/m <sup>3</sup>
OSHA Z1A	time weighted average	800 ppm
OSHA Z1A	time weighted average	1,900 mg/m <sup>3</sup>
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	800 ppm
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,900 mg/m <sup>3</sup>
<b>ETHYLENE GLYCOL MONOBUTYL ETHER</b>		<b>111-76-2</b>
ACGIH	time weighted average	20 ppm
NIOSH	Recommended exposure limit (REL):	5 ppm
NIOSH	Recommended exposure limit (REL):	24 mg/m <sup>3</sup>
OSHA Z1	Permissible exposure limit	50 ppm
OSHA Z1	Permissible exposure limit	240 mg/m <sup>3</sup>
<b>PROPANE</b>		<b>74-98-6</b>
NIOSH	Recommended exposure limit (REL):	1,000 ppm
NIOSH	Recommended exposure limit (REL):	1,800 mg/m <sup>3</sup>
OSHA Z1	Permissible exposure limit	1,000 ppm
OSHA Z1	Permissible exposure limit	1,800 mg/m <sup>3</sup>

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OSHA Z1A	time weighted average	1,000 ppm
OSHA Z1A	time weighted average	1,800 mg/m <sup>3</sup>
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,000 ppm
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,800 mg/m <sup>3</sup>
ACGIH	time weighted average	1,000 ppm

**General advice**

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

**Exposure controls**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Eye protection**

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

**Skin and body protection**

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).

Discard gloves that show tears, pinholes, or signs of wear.

**Respiratory protection**

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release,

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exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	aerosol
<b>Form</b>	No data
<b>Colour</b>	No data
<b>Odour</b>	No data
<b>Boiling point/boiling range</b>	-42.00 °C / -44 °F
<b>pH</b>	No data
<b>Flash point</b>	No data
<b>Evaporation rate</b>	No data
<b>Explosion limits</b>	1.1 %(V) 1.9 %(V) 12.7 %(V)
<b>Vapour pressure</b>	7,999.00 hPa @ 77 °F / 25 °C
<b>Vapour density</b>	No data
<b>Density</b>	0.95 g/cm <sup>3</sup>
	No data
<b>Solubility</b>	completely soluble in water
<b>Partition coefficient: n-octanol/water</b>	No data
<b>log Pow</b>	no data available
<b>Autoignition temperature</b>	No data

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to avoid

heat

### Incompatible products

Strong oxidizing agents, aluminum, salts of strong bases, Strong acids, strong alkalis

### Hazardous decomposition products

carbon dioxide and carbon monoxide, Hydrocarbons, Aldehydes, ketones, Organic acids

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**Hazardous reactions**

Product will not undergo hazardous polymerization.

**Thermal decomposition**

No data

**11. TOXICOLOGICAL INFORMATION**

**Acute oral toxicity**

BUTANE NORMAL	LD 50 Rat: > 5 g/kg
ETHYLENE GLYCOL MONOBUTYL ETHER	LD 50 Guinea pig: 1,200 mg/kg
PROPANE	no data available

**Acute inhalation toxicity**

BUTANE NORMAL	LC 50 Rat: 658 mg/l ,
ETHYLENE GLYCOL MONOBUTYL ETHER	LC 50 Guinea pig: > 633 ppm, 1 h
PROPANE	LC 50 Rat: > 12190 ppm, 4 h

**Acute dermal toxicity**

BUTANE NORMAL	LD 50 Rabbit: > 3.16 g/kg
ETHYLENE GLYCOL MONOBUTYL ETHER	LD 50 Guinea pig: > 2,000 mg/kg
PROPANE	no data available

**12. ECOLOGICAL INFORMATION**

**Aquatic toxicity**

**Acute and Prolonged Toxicity to Fish**

No data

**Acute Toxicity to Aquatic Invertebrates**

No data

**Environmental fate and pathways**

No data



**ASHLAND**  
**SAFETY DATA SHEET**

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ETHYLENE GLYCOL                      111-76-2                      2%  
MONOBUTYL ETHER

**Reportable quantity - Components**

BUTANE NORMAL                      106-97-8                      none  
ETHYLENE GLYCOL                      111-76-2                      none  
MONOBUTYL ETHER  
PROPANE                                  74-98-6                      none

	Health	Flammability	Reactivity	Other
HMIS	1	2	0	
NFPA	1	2	0	

**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).