

# Material Safety Data Sheet



## 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

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24-Hour Emergency Phone Number: 989-636-4400

Product: ETHAFOAM\* 4101 NATURAL POLYETHYLENE FOAM PLANK

Product Code: 37076

Effective Date: 06/24/99

Date Printed: 12/17/01

MSD: 002000

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Polyethylene foam	CAS# 009002-88-4	94-100%
Fire retardant additive:		
Antimony trioxide	CAS# 001309-64-4	1- 3%
chlorinated paraffins	CAS# 063449-39-8	1- 3%

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

\*\*\*\*\*  
\* Milky white or colored solid. Toxic fumes are released in fire \*  
\* situations. Appearance: Cellular solid plastic foam. Odor: No \*  
\* odor. \*  
\* \*  
\*\*\*\*\*

### POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: Solid or dust may cause irritation or corneal injury due to mechanical action. Fumes/vapors released during thermal operations such as hot-wire cutting may cause eye irritation and respiratory irritation.

SKIN: Essentially nonirritating to skin. Mechanical injury only. Contains a minor component antimony trioxide which may cause allergic skin reaction in susceptible individuals; however, exposure to antimony trioxide is unlikely because it is embedded in the foam. Skin absorption is unlikely due to physical properties.

INGESTION: Ingestion is unlikely due to physical state. Physical

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injury only. May cause choking if swallowed.

INHALATION: Dust may cause irritation to upper respiratory tract and lungs. Fumes/vapors generated during thermal operations such as hot wire cutting may cause eye and respiratory irritation. Exposure to metal oxides (antimony trioxide) fumes may cause metal fume fever, characterized by flu-like symptoms.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Repeated exposure to dusts may cause respiratory effects. Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

CANCER INFORMATION: For hazard communication purposes under OSHA Standard 29 CFR Part 1910.1200, antimony trioxide is listed as a potential carcinogen by IRAC. Has caused cancer in some studies in laboratory animals. Positive findings occurred only when exposures were to high dust levels which overloaded the lungs.

REPRODUCTIVE EFFECTS: In animal studies; antimony trioxide has been shown to interfere with reproduction in female rats.

#### 4. FIRST AID

EYE: Flush eyes with plenty of water; mechanical effects only.

SKIN: Wash off in flowing water or shower.

INGESTION: No adverse effects anticipated by this route of exposure.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

#### 5. FIRE FIGHTING MEASURES

##### FLAMMABLE PROPERTIES

FLASH POINT: Not applicable

METHOD USED: Not applicable

##### FLAMMABILITY LIMITS

LFL: Not applicable

UFL: Not applicable

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HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions polymers decompose. The smoke may contain polymer fragments of varying compositions in addition to unidentified toxic and/or irritating compounds.

OTHER FLAMMABILITY INFORMATION: Dense smoke is emitted when burned without sufficient oxygen.

EXTINGUISHING MEDIA: Water, carbon dioxide, dry chemical.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. Cool surroundings with water to localize fire zone. Soak thoroughly with water to cool and prevent reignition.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

#### 6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Clear non-emergency personnel from area.

PROTECT THE ENVIRONMENT: Avoid contamination of drinking water, natural water, ground water or any waterway.

CLEANUP: Sweep up.

#### 7. HANDLING AND STORAGE

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:  
Practice reasonable care and cleanliness as a common sense safety precaution when handling this product.

WARNING: This foam is combustible and should not be exposed to flame or other ignition sources.

WARNING: Exercise appropriate caution when using this product in application involving exposure to children. Choking and/or swallowing of foam by small children may occur.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Use safety glasses. If there is a potential for exposure to particles which could cause mechanical injury to the eye, wear chemical goggles.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed.

RESPIRATORY PROTECTION: When respiratory protection is required for certain operations, use an approved air-purifying respirator. In dusty atmospheres, use an approved dust respirator.

EXPOSURE GUIDELINES:

Although some of the additives used in this product may have exposure guidelines, these additives are encapsulated in the product and no exposure would be expected under normal handling conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Cellular solid plastic foam

ODOR: No odor

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

BOILING POINT: Not applicable

SOLUBILITY IN WATER/MISCIBILITY: Insoluble

SPECIFIC GRAVITY/DENSITY: 0.059-0.064

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Thermally stable at typical use temperatures.

CONDITIONS TO AVOID: Avoid temperatures above 625F/329C. Product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition

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products depend upon temperature, air supply and the presence of other materials. Processing may release fumes which may include polymer fragments and other decomposition products. Fumes can be irritating. At temperatures exceeding melt temperatures, polymer fragments can occur. Hazardous decomposition products may include and are not limited to: carbon monoxide.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

#### ENVIRONMENT FATE

##### MOVEMENT & PARTITIONING:

No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material is expected to float.

DEGRADATION & PERSISTENCE: This water insoluble polymeric solid is expected to be inert in the environment. Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

ECOTOXICITY: Not expected to be acutely toxic.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

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FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device, and landfill.

As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customers Information Center at 800-258-2436 or 517-832-1556 for further details.

#### 14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.): This product is not regulated by D.O.T. when shipped domestically by land.

CANADIAN TDG INFORMATION: For guidance, the Transportation of Dangerous Goods Classification for this product is:

Not regulated.

#### 15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

#### U.S. REGULATIONS

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SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
ANTIMONY TRIOXIDE	001309-64-4	<3 %

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SARA HAZARD CATEGORY: This product has been reviewed according to the

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REGULATORY INFORMATION (CONTINUED)

EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

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## TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

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STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
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ISOBUTANE	000075-28-5	NJ1
ANTIMONY TRIOXIDE	001309-64-4	NJ2 NJ3 PA1 PA3

NJ1=New Jersey Special Health Hazard Substance (present at greater than or equal to 0.1%).

NJ2=New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%).

NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

PA3=Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%).

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## OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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REGULATORY INFORMATION (CONTINUED)

## CANADIAN REGULATIONS

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WHMIS INFORMATION: The Canadian Workplace Hazardous Materials  
Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

## 16. OTHER INFORMATION

MSDS STATUS: Revised Section 15, State Right-To-Know.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health	0
Flammability	1
Reactivity	0

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The Information Herein Is Given In Good Faith, But No Warranty,  
Express Or Implied, Is Made. Consult The Dow Chemical Company  
For Further Information.