

SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name(s): Flexible Polyurethane Foam
Flexible Bio-Foam Polyurethane Foam



Product Use: Formed polyurethane products

Chemical Family: Cellular polyurethane; Additional CAS Registration # 9009-54-5.

Supplier: Woodbridge Foam Corporation
4240 Sherwoodtowne Blvd.
Mississauga, Ontario, Canada
L4Z 2G6

Emergency: (905) 851-3914 (9 a.m. to 5 p.m.)

Section 2: Hazards Identification

NFPA (USA)	WHMIS Classification (Canada)	Transport Symbol	Personal Protective Equipment
	Not Controlled	Not Regulated for Transportation	

Emergency Overview:

Exposure to hazardous substances is not expected when handling this product for its intended use. The polymer is essentially inert with low oral and dermal toxicity. In some workplaces, operations with this product may lead to generation of dust. Exposure to dusts may have occupational health hazards.

NOTE: The toxicological properties of this foam and certain components used in the manufacture of this foam, which may be present in the final product, have not been fully investigated. Processors and users of this product are encouraged to perform their own testing to assure this product is suitable for its intended end use(s).

Appearance, Colour and Odour: Solid cellular structure that is white to off-white natural or specified colour (e.g. black). Shade may change on exposure to air and/or ultraviolet light. Nearly odourless.

USA: This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Canada: This product is not regulated under WHMIS.

This SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Section 2: Hazards Identification (continued)

Potential Health Effects: ACUTE (short term): see Section 8 for exposure controls

Relevant Route(s) of Exposure: Inhalation, Ingestion, Skin Contact, Eye contact.

Inhalation: High concentrations of airborne mist may irritate the respiratory tract and mucous membranes.

Ingestion: Ingestion is not an expected route of occupational exposure. Product may be harmful if swallowed.

Skin: No health effects expected with normal use of the product.

Eye: No health effects expected with normal use of the product.

During processing operations, airborne particulates may cause temporary irritation as a foreign object in the eye. Extreme heating of the product may release irritating vapors. Symptoms of irritation include redness, swelling, pain and blurred or hazy vision.

CHRONIC (long term): see Section 11 for additional toxicological data

No health effects expected with normal use of the product.

Medical Conditions Aggravated by Exposure: Not available

Interactions With Other Chemicals: Not applicable

Potential Environmental Effects: Not applicable

Section 3: Composition / Information on Ingredients

Hazardous Ingredients:

No hazardous ingredients by OSHA and WHMIS criteria.

Polyurethane foam is a reaction of product of toluene diisocyanate and/or methylene bisphenyl isocyanate, water, and polyols (may be polyoxyalkylene polyether polyol or polyester polyol, or bio-polyol derived from renewable resources, or a combination of the these polyols). May contain small amounts of insoluble inorganic fillers or plasticizer extenders. May contain small amounts of pigment and/or reactive dye to achieve specified colour.

Section 4: First Aid Measures

Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. Obtain medical advice.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes, while holding the eyelids open. Obtain medical advice.

Skin Contact: Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Flush with lukewarm, gently flowing water and non-abrasive soap for 5 minutes. Obtain medical advice.

Ingestion: Never give anything by mouth if victim is rapidly losing consciousness or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs naturally, have victim rinse mouth with water again. Immediately obtain medical attention.

Section 5: Fire Fighting Measures

Flammable Properties:	Product will burn if strongly heated (>350°C/662°F) . Material can be ignited by an open flame or by a source of smoldering ignition, by itself or in combination with some other materials. Any reference to combustion modification or reduced burn rate refers, for the most part, to small scale laboratory tests and such ratings are not intended to reflect hazards presented by this or any other material under actual fire conditions.
Suitable extinguishing Media:	Use large volumes of water. ABC dry chemical extinguishers may be appropriate for initial control of small volumes of foam.
Unsuitable extinguishing Media:	Not available
Explosion Data:	Not explosive in its manufactured form. High concentrations of fine product dust from further processing of the foam may create an explosion hazard. Prevent accumulation of dust in work and storage areas.
Sensitivity to Mechanical Impact:	Not applicable
Sensitivity to Static Discharge:	Not available
Specific Hazards arising from the Chemical:	During a fire, burning may generate carbon monoxide, nitrogen oxides, aldehydes, organic acids, hydrocarbons, hydrogen cyanide, irritating and toxic fumes. Burning of large volumes of foam can produce dense clouds of thick, black smoke, which can make it difficult to escape from the fire area. Overheating can produce a hot, semi-liquid melt, which can produce contact blisters and release toxic and/or flammable gases or vapours. Foam may tend to melt while burning, forming a flaming, molten product, which could spread the fire. Beware of smoldering re-ignition. After extinguishing, soak completely, tear or cut foam apart and remove burned material to a safe outdoor area. CAUTION: Foam may appear to be extinguished but may be burning or smoldering internally and/or contain molten product. Do not allow smoking in areas where foams are made or stored. Check for compliance with insurance regulations, local building codes or other legal requirements.
Protective Equipment and precautions for firefighters:	As for any fire, evacuate the area and fight the fire from a safe distance. Wear a pressure-demand, self-contained breathing apparatus and full protective gear. Fight fire from a protected location or a safe distance. Any water runoff should be minimized and contained.
NFPA	
	Health: 0
	Flammability: 1
	Instability: 0

Section 6: Accidental Release Measures

Personal Precautions:	Wear adequate personal protective equipment as indicated in Section 8. Isolate spill area, preventing entry by unauthorized persons. Ventilate area of spill if there is excessive airborne dust or fume.
Environmental Precautions:	Prevent material from contaminating soil and from entering sewers or waterways.
Methods for Containment:	Stop the spill if safe to do so.
Methods for Clean-up:	Avoid dust generation. Scrape or scoop product for re-use or place a secure container for disposal.

Section 7: Handling and Storage

Handling: Keep away from contact with open flame and other non-processing sources of ignition. Avoid inhalation of product dust, fumes or smoke. Maintain good housekeeping. Remove accumulations of small foam pieces and/or particles on a regular basis. Appropriate local exhaust ventilation is required for all processes where fumes, smoke or dust are generated. Wash thoroughly with detergent and water after handling, before eating, drinking, smoking or using the toilet. Remove contaminated clothing and wash before reuse.

Storage: Keep away from contact with open flame, sparks and other heat sources. Avoid elevated storage temperatures. Maximum stacking height and minimum stacking height and minimum sprinkler head clearance may be required (refer to NFPA and FM standards). Check for compliance with insurance regulations, local building codes and other legal requirements.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

<u>Ingredient</u>	<u>ACGIH TLV (8-hr. TWA)</u> mg/m ³	<u>U.S. OSHA PEL (8-hr. TWA)</u> mg/m ³	<u>Ontario (Canada) TWAEV</u> mg/m ³
Inhalable dust	Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS) 3 (respirable) 10 (inhalable)	Particles (insoluble or poorly soluble) Not Otherwise Regulated (PNOR) 5 (respirable) 15 (total dust)	Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS) 3 (respirable) 10 (inhalable)

Exposure Controls

Engineering Controls: Provide appropriate ventilation to control dust to concentrations below the exposure guidelines.

Personal Protection: Follow the directions for personal protective equipment for the worksite.

Eye/Face Protection: During operations where dust, fume or vapour is generated, wear eye and face protection appropriate for the operation.

Skin Protection: When handling fresh foam and when hot processing, wear appropriate protective clothing and gloves.

Respiratory Protection: When dust, fume or vapor concentrations in air exceed the occupational exposure guidelines, always wear respiratory protection. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or Canadian Standards Association (CSA) Standard Z94.4-2002 must be followed whenever workplace conditions warrant a respirator's use.

Other Protective Equipment: A safety shower and eye-wash fountain may be required in the immediate work area.

General Hygiene Measures: Do not eat, drink or smoke in work areas. Wash hands thoroughly after handling this material. Maintain good housekeeping.

Section 9: Physical and Chemical Properties

Physical State:	Solid, flexible	Flash Point & method:	Not available
Appearance, Colour and Odour:	White to off-white, natural or specified colour. Nearly odourless.	Autoignition Temperature:	>350°C (662°F)
Odour Threshold:	Not available	Flammability Limits in Air:	Not available
pH:	Not applicable	Vapour Pressure: (mm Hg @ 50°C)	Not available
Specific Gravity: (water = 1)	0.02 – 0.20	Vapour Density: (Air = 1)	Not available
Partition coefficient: (n-octanol/water)	Not applicable	Evaporation Rate: (n-Butyl Acetate = 1)	Not available
Solubility:	Insoluble in water.	Boiling Point/Range:	Not available
Viscosity:	Not applicable	Melting Point:	335° - 370°C (635 – 689°F) D.T.A. decomposition

Section 10: Stability and Reactivity

Chemical Stability:	Stable
Conditions to Avoid:	Avoid heat, flame, and high temperatures.
Incompatible Materials:	Can react with strong oxidizing agents. May decompose in contact with strong acids and strong bases. Exposure to ultraviolet light may alter the colour shade. Any changes or modifications to the foam products or the addition of or combination with other materials require a re-evaluation of the potential hazards by the processor or user.
Hazardous Decomposition Products:	Combustion may generate carbon monoxide, nitrogen oxides, aldehydes, organic acids, hydrocarbons, hydrogen cyanide, dense smoke, irritating and toxic fumes.
Possibility of Hazardous Reactions:	Not applicable

Section 11: Toxicological Information

Acute Toxicity Data

<u>Ingredient</u>	<u>LD₅₀ Oral</u> (mg/kg)	<u>LD₅₀ Dermal</u> (mg/kg)	<u>LC₅₀ Inhalation (4 hrs.)</u> <u>mg/m³</u>
Polyurethane foam	Not available	Not available	Not available

Chronic Toxicity Data

Carcinogenicity:	This mixture does not contain any component that is considered a carcinogen or potential carcinogen under the definition specified by OSHA 29 CFR 1910.1200(d) (4). This mixture does not contain any component that is considered a human carcinogen by IARC (International Agency for Research on Cancer), ACGIH (American Conference of Governmental Industrial Hygienists) or NTP (National Toxicology Program).
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Section 11: Toxicological Information, continued

Irritation:	During processing operations, airborne particulates may cause temporary irritation as a foreign object in the eye. Heating of the product may release irritating vapors.
Corrosivity:	Not applicable
Sensitization:	Not applicable
Neurological Effects:	Not applicable
Genetic Effects:	Not applicable
Reproductive Effects:	Not applicable
Developmental Effects:	Not applicable
Target Organ Effects:	Not applicable

Section 12: Ecological Information

Ecotoxicity:	Not available
Persistence/Degradability:	Not available
Bioaccumulation/Accumulation:	Not available
Mobility:	Not available

Section 13: Disposal Considerations

Waste Disposal Method:	This product can be recycled. Shred or bale uncontaminated waste scrap foam for recycling. Do NOT dump into any sewers, on the ground or into any body of water. Store material for disposal as indicated in Section 7 Handling and Storage.
USA:	Dispose of in accordance with local, state and federal laws and regulations.
Canada:	Dispose of in accordance with local, provincial and federal laws and regulations.

Section 14: Transport Information:

U.S. Hazardous Materials Regulation (DOT 49CFR):	Not Regulated
Canadian Transportation of Dangerous Goods (TDG):	Not Regulated
ADR/RID:	Not Regulated
IMDG:	Not Regulated
Marine Pollutants:	Not applicable
ICAO/IATA:	Not Regulated

Section 15: Regulatory Information

USA

TSCA Status: Polyurethane foam meets the definition of an Article 19 CFR Section 12.120(a); 40 CFR Sections 704.3, 710.2(e) and 720.3(c).

SARA Title III

Sec. 302/304: Not available

Sec. 311/312: Not available

Sec. 313: Not available

CERCLA RQ: Not available

California Prop 65: Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

WHMIS Classification: This product is not controlled under WHMIS.
(for workplace exposures)

DSL Status: Polyurethane foam meets the definition of a manufactured item. Substances described as
(New Substance manufactured items are not subject to the regulations and are therefore excluded from
Notification Regulations) notification.

NPRI Substances: Not available
(National Pollutant Release Inventory)

Section 16: Other Information

Revision Date: September 11, 2009

Revision Summary: Previous Revision July 8, 2009
Revised Product Name in Section 1 and Composition Information in Section 3

Manufacturer Contact: Woodbridge Foam Corporation
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Manufacturer Disclaimer: While Woodbridge Foam Corporation believes that the data set forth herein is accurate, as of the date hereof, Woodbridge makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation and verification.