

SAFETY DATA SHEET

Section 1: Identification

1.1 Product identifier:

Flexible Polyurethane Foam
Flexible Bio-Foam Polyurethane Foam

Other means of Identification: Cellular polyurethane, Formed Polyurethane products

1.2 Recommended use:

Identified uses:
Additive in the manufacture of polyurethane foam.

Restrictions on use:
Not indicated for domestic or consumer uses.

1.3 Supplier:

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

1.4 Emergency telephone number:

+1 202 464 2554 (24-hour)

Section 2: Hazards Identification

2.1 Classification:

Not classified under any GHS hazard classes.

As this product qualifies as "finished goods" and does not meet the definition of a "substance" that requires a Safety Data Sheet, the document is provided as a "courtesy" to customers and stakeholders.

2.2 Label elements:

Not applicable, not classified.

2.3 Other hazards:

While this product is not considered hazardous by OSHA and 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 3: Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Wt. %</u>	<u>Other identifiers</u>
No hazardous chemical ingredients by WHMIS and OSHA criteria	Not applicable	Not applicable	Not applicable
Polyurethane foam is solid manufactured article, 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 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.			

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Section 4: First-Aid Measures

4.1 Description of first aid measures:

Inhalation: Remove source of exposure or move to fresh air. Get medical advice if you feel unwell or are concerned.

Eye Contact: Rinse cautiously with water for several minutes. If eye irritation persists, get medical attention.

Skin Contact: Rinse skin with water and mild soap. If skin irritation occurs, get medical advice.

Ingestion: If exposed or concerned, get medical attention.

4.2 Most important symptoms and effects, acute and delayed:

If inhaled: Symptoms from exposure by inhalation are not expected from the solid, formed article. Exposures to dusts or fumes generated during processing may cause irritation to the respiratory tract.

If in eyes: Particulates may cause temporary irritation as a foreign object in the eye.

4.3 Indication of any immediate medical attention and special treatment needed:

Not applicable

Section 5: Fire-Fighting Measures

5.1 Extinguishing media:

Use large volumes of water. ABC dry chemical fire extinguishers may be appropriate for initial control of small volumes of foam.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the chemical:

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.

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.

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.

5.3 Special protective equipment and precautions for firefighters:

Evacuate the area and fight fire from a safe distance or a protected location.

Do not enter without specialized protective equipment suitable for the situation.

Approach the fire from upwind to avoid hazardous vapors.

Wear a pressure-demand, self-contained breathing apparatus and full protective gear.

Contain water run-off if possible.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear personal protective equipment as recommended in Section 8 of this SDS.

Avoid breathing any airborne dusts.

6.2 Environmental precautions:

Do not allow into any sewer, on the ground or into any waterway.

6.3 Methods and material for containment and cleaning up:

Stop or reduce leak if safe to do so.

Clean up spills immediately.

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Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Keep away from excessive heat and ignition sources.
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 it before reuse.

7.2 Conditions for safe storage:

Store in an area that is: out of direct sunlight and away from heat and ignition sources.
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.
Do NOT smoke in work and storage areas.

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters:

Occupational Exposure Limits: Consult local authorities for acceptable exposure limits.

Ingredient	ACGIH®	OSHA
Particles (insoluble or poorly soluble)	10 (inhalable)	15 (total dust) PNOR
Not Otherwise Specified (PNOS)	3 (respirable)	5 (respirable) PNOR

8.2 Exposure controls:

Engineering controls: General ventilation is usually adequate. In workplaces where operations generate dusts of this product, provide adequate ventilation to control dust concentrations below the exposure guidelines.

If engineering controls and work practices are not effective in controlling exposure to this material or if adverse health symptoms are experienced, then wear suitable personal protection equipment including approved respiratory protection. Have appropriate equipment available for use in emergencies such as spills or fire.

8.3 Individual protection measures:

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

Skin protection: Wear chemical protective gloves when handling fresh foam.
Wear thermal protective gloves and clothing for operations involving hot processing.

Resistance of specific materials can vary from product to product; evaluate resistance under conditions of use and maintain clothing carefully.

Respiratory protection: If concentrations in air exceed the occupational exposure limits, then 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 the regulatory requirement, such as OSHA's 29 CFR 1910.134, ANSI Z88.2 or Canadian Standards Association (CSA) Standard Z94.4, must be followed whenever workplace conditions warrant a respirator's use.

Other protection: Workplaces should have a safety shower, hand-wash station and eye-wash fountain readily available in the immediate work area.

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Section 9: Physical and Chemical Properties

Basic physical and chemical properties:	
Appearance:	Solid, flexible foam. White to off-white, grey, or other specified colour.
Odor:	Nearly odourless.
Odor threshold:	Not applicable
pH:	Not applicable
Melting point/freezing point:	335° - 370°C (635 – 689°F) D.T.A. decomposition
Initial boiling point and boiling range:	Not applicable
Flash point:	Not applicable
Evaporation Rate:	Not applicable
Flammability (solid, gas):	Non-flammable
Upper/lower flammability or explosive limits:	Not applicable
Vapor pressure:	Not applicable
Vapor density:	Not available
Relative density:	0.02 – 0.20 (water=1)
Solubility (ies):	Insoluble in water
Partition coefficient (n-octanol/water, log K_{ow}):	Not applicable
Auto-ignition temperature:	>350°C (662°F)
Decomposition temperature:	>335°C
Viscosity:	Not applicable

Section 10: Stability and Reactivity

10.1 Reactivity:

Not reactive under normal conditions of use.

10.2 Chemical stability:

Normally stable.

10.3 Possibility of hazardous reactions:

None known.

10.4 Conditions to avoid:

High temperatures. Sunlight. Flames.

10.5 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.

10.6 Hazardous decomposition products:

Combustion may generate irritating and toxic fumes which may include: carbon monoxide, nitrogen oxides, aldehydes, organic acids, hydrocarbons, hydrogen cyanide, dense smoke.

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Section 11: Toxicological Information

11.1 Information on toxicological effects

Likely routes of exposure

Skin contact, Eye contact. Possible inhalation if heated or dust formed during use.

Acute toxicity

Inhalation: No test data available for the solid article. Heating of the product to decomposition may release irritating fumes.

Ingestion: No test data available for the solid article. If swallowed, product may cause irritation of the mouth, throat and stomach; symptoms may include nausea, diarrhea or vomiting. May be an aspiration hazard if swallowed.

Skin: No test data available for the solid article. Not harmful based on human experience.

11.2 Acute toxicity data

<u>Product</u>	<u>LD₅₀ Oral</u>	<u>LD₅₀ Dermal</u>	<u>LC₅₀ Inhalation (4 hrs.)</u>
Polyurethane foam	Not available	Not available	Not available

Skin corrosion / irritation:

Not a skin irritant based on human experience.

Serious eye damage / irritation:

Not an eye irritant based on human experience.

STOT (Specific Target Organ Toxicity) Single Exposure:

Not known to cause adverse effects.

Aspiration hazard:

Not known to be an aspiration hazard based on physical properties.

11.3 Chronic toxicity

STOT (Specific Target Organ Toxicity) Repeated Exposure:

Not known to cause adverse effects following repeated exposures.

Respiratory and / or skin sensitization:

Not known to be a skin sensitizer. Not known to be a respiratory sensitizer.

Carcinogenicity:

No ingredients of this product have been evaluated for carcinogenicity by the International Agency for Research on Cancer (IARC), the American Conference of Governmental Industrial Hygienists (ACGIH®) or the US National Toxicology Program (NTP).

Reproductive effects:

Not known to cause adverse effects on fertility.

Developmental effects:

Not known to harm the unborn child.

Effects on or via lactation:

No information was located.

Germ cell mutagenicity:

Not known to be a mutagen.

Interactions with other chemicals:

None known.

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Section 12: Ecological Information

12.1 Ecotoxicity:

Toxicity data are not applicable to this solid article.

12.2 Persistence and degradability:

Not readily biodegradable

12.3 Bioaccumulative potential:

Data not available

12.4 Mobility in soil:

If released into the environment, this product does not move through the soil.

Section 13: Disposal Considerations

13.1 Disposal methods:

Recycle and reuse product, if possible.

Shred or bale uncontaminated waste scrap foam for recycling.

Store product for disposal as described under Storage in Section 7 of this safety data sheet.

Dispose of waste in accordance with relevant national, regional and local environmental control provisions.

Section 14: Transport Information

14.1 UN Number:

Does not meet the criteria for dangerous goods by UN Model Regulations, IMDG Code and IATA.

14.2 UN proper shipping name:

Not applicable

14.3 Transport hazard class(es):

Not applicable

14.4 Packing group:

Not applicable

14.5 Environmental hazards:

Not available

14.6 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:

Not available

14.7 Special precautions for user:

Not available

14.8 U.S. Hazardous Materials Regulation (DOT 49CFR):

Not regulated

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations

Canada:

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL): All ingredients are listed on the DSL or are not required to be listed. Polyurethane foam meets the definition of a manufactured item. Substances described as manufactured items are not subject to the regulations and are therefore excluded from notification.

USA:

Toxic Substances Control Act (TSCA) Section 8(b): All ingredients are exempt from TSCA Inventory requirements. 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).

EU:

Classification according to Regulation (EC) No 1272/2008: Not classified as hazardous.

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Section 16: Other Information

Revision date:

August 2, 2018

Date of previous version:

August 4, 2016

Revision indicators: New 24 Hour Emergency Telephone Number

References and sources for data:

CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).

HSDB® database. US National Library of Medicine.

NIOSH Pocket Guide database. National Institute for Occupational Safety and Health.

Registry of Toxic Effects of Chemical Substances (RTECS®) database.

Legend to abbreviations:

ACGIH – American Conference of Governmental Industrial Hygienists

GHS- Globally Harmonised System for Classification and Labeling.

LD₅₀- Median lethal dose; the dose causing 50 % lethality

NFPA - National Fire Prevention Association

NOAEL- No Observed Adverse Effect Level

OEL– Occupational exposure limit

STEL – Short term exposure limit

TWA – Time weighted average

Additional Information:

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.