



2001 NB by BioBased Insulation® B – Component Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	2001 NB by BioBased Insulation® B – Component
Synonyms/Generic Names:	Polyol blend with Amine Catalyst
Product Use:	Poly urethane spray foam component
Manufacturer:	BioBased® Insulation, LLC 1200 Stewart Place, Springdale, AR 72764 (479) 966-4600 (479) 966-4601 (fax) Website: www.biobased.net
In Case Of Emergency Call:	CHEMTREC (800) 424-9300 (24 Hours/Day, 7 Days/Week, US and Canada) or call (collect) at (703) 527-3887 (USA)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: A brownish liquid with an amine-like (organic) odor. Liquid and mists can irritate the skin and may irritate or burn the eyes and respiratory tract. . Liquid and vapor is harmful via skin contact, inhalation or ingestion. Liquid or vapors may cause allergic skin reactions to individuals sensitive to amines.

OSHA Hazard Communication Standard:	This product is considered hazardous.
--	---------------------------------------

Potential Health Hazards:

Skin:	Can irritate the skin. Can be absorbed through the skin and large or repeated exposures may result in toxic effects similar to ingestions. May cause allergic skin or respiratory reactions to individuals sensitive to amines
Eyes:	Can be irritation and/or burns and untreated exposures may result in blindness.
Inhalation:	Vapors and mists may cause irritation to respiratory tract with possible burns to throat and airways. Vapors can irritate or burn the eyes. Inhalation of large quantities may result in symptoms similar to ingestion.
Ingestion:	Harmful if swallowed. Can irritate or burn the digestive tract. If vomited, may enter lungs, causing lung damage. Ingestion may cause gastrointestinal disturbances. Large exposures may result in diarrhea, blurred vision, cramps, tremors, muscle twitching, sweating or headache. Liver and kidney damage is also a potential effect. At level above the recommended exposure limit, the fluorocarbon acts as weak narcotic.
Delayed Effects:	No other known chronic effects.

Ingredients found on one of the three OSHA designated carcinogen lists are listed below.

Ingredient Name	NTP Status	IARC Status	OSHA List
No ingredients listed in this section.	----	----	----

MSDS – 2001 NB by BioBased Insulation® B – Component

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	Weight %
Polyol	Unavailable	<75%
Flame Retardant	Unavailable	<15%
2-Dimethylaminoethanol	108-01-0	<3%
Surfactant	Unavailable	<2%
Catalyst	Unavailable	<5%
1,1,1,3,3-pentafluoropropane	460-73-1	<10%

Trace impurities and additional material names not listed above may appear in Section 15 of this MSDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons.

4. FIRST AID MEASURES

Skin:	Immediately rinse under running water while removing contaminated clothing. Continue washing for up to 15 minutes. Get medical assistance for irritation. Launder contaminated clothing before reuse and discard any contaminated leather apparel (shoes, watch band, etc.)
Eyes:	Immediately flush eyes with running water while lifting the eyelids and continue for up to 15 minutes. Lift eyelids to wash out any liquid. Get immediate medical attention.
Inhalation:	Move the exposed person to fresh air. If person has difficulty breathing or is in distress, immediately contact a doctor, poison control center or paramedic. Provide oxygen if a trained responder is available. For irritation, burns or any systemic (internal) symptom, get immediate medical assistance.
Ingestion:	Immediately consult a physician or poison control center. Do not induce vomiting.
Advice to Physician:	Product is corrosive. May cause allergic skin, eye or respiratory reactions to individuals sensitive to amines. No specific antidote is recommended. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point (and method)	Expected to be >392°F (> 200 °C) Pensky Martin Closed Cup. Actual data is not available
Autoignition Temperature:	Not determined
Upper Flame Limit (volume % in air):	Not determined
Lower Flame Limit (volume % in air):	Not determined
Flame Propagation Rate (solids):	Not applicable
OSHA Flammability Class: (storage)	IIIB

Extinguishing Media:	Water fog, high expansion foam, dry chemical, carbon dioxide or water spray. Avoid solid stream of water if liquid is heated to ignition. It may spread burning liquid.
Unusual Fire And Explosion Hazards:	Sealed containers can rupture violently when exposed to fire.
Special Fire Fighting Precautions/Instructions:	Wear self contained breathing apparatus. Avoid skin or eye contact with liquid and vapors.

MSDS – 2001 NB by BioBased Insulation® B – Component

6. ACCIDENTAL RELEASE MEASURES

In Case Of Spill or Other Release:	(See Section 8 for recommended personal protective equipment.) Avoid contact with skin and eyes. Do not breathe product vapors. Eliminate all sources of ignition. Small spills: Soak up with absorbent material such as oil-dry or vermiculite. Shovel into containers but DO NOT seal them. Arrange for disposal. Large spills: Ventilate area during cleanup. Dike spill and pump into suitable containers for disposal. Do not allow to enter natural waterways or sewers.
---	--

Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.

7. HANDLING AND STORAGE

Normal Handling:	Avoid contact with skin, eyes and clothing. Do not breathe product vapors or mists. (See Section 8 for recommended personal protective equipment.) Product should not be mixed with air above atmospheric pressure for leak testing or any other purpose. Use dry Nitrogen to transfer or leak test equipment pressurized with product.
Storage Recommendations:	Keep containers closed during storage. Store away from moisture, isocyanates and oxidizing agents. (See Section 10 for hazards associated with contamination.) Do not contaminate with any material. Contamination BioBased® A - Component materials may cause a reaction generating pressure that could cause a closed container to explode. Product life is approximately 6 months when stored between 70 - 80 °F (21- 27 °C). Do not allow product to become contaminated with other materials, especially with BioBased® A - Component.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	Provide local exhaust ventilation sufficient to keep vapors below safe exposure limits.
------------------------------	---

Personal Protective Equipment

Skin Protection:	Chemical resistant protective gloves made of rubber and clothing are recommended.
Protection:	Wear safety glasses with eye-shields or chemical safety goggles. Avoid the use of contact lenses for liquid transfer and handling operation.
Respiratory Protection:	The level of respiratory protection needed should be based on the evaluation of chemical exposures by a health or safety professional. For areas containing product mists, for areas where the exposure limits may be exceeded and for spill cleanup, use an air supplied respirator or use a NIOSH approved air purifying respirator with organic vapor cartridge.
Additional Recommendations:	A source of running water such as a safety shower and/or eyewash station is recommended in the work area.

MSDS – 2001 NB by BioBased Insulation® B – Component

Exposure Guidelines

Ingredient	ACGIH TLV	OSHA PEL	Other Limit

¹ = Limit established by BioBased Insulation®.

² = Workplace Environmental Exposure Level (AIHA).

³ = Biological Exposure Index (ACGIH).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brownish liquid		
Physical State:	Liquid		
Odor	Amine like odor (organic odor).		
Bulk Density	9.60 – 9.83 lb/USg @ 77°F (25 °C)		
Solubility In Water (weight %):	Moderately soluble		
pH:	≥7		
Boiling Point:	Not determined		
Freezing Point:	Not determined		
Viscosity	800 – 1000 mPa.s @73.4°F (23 °C)		
Vapor Pressure:	Not determined		
Vapor Density (air = 1.0):	Not determined		
Evaporation Rate:	Not determined	Compared To:	
% Volatiles:	Not determined		
Flash Point (and method)	Expected to be >392°F (> 200 °C) Pensky Martin Closed Cup. Actual data is not available		
Autoignition Temperature:	Not determined		
Upper Flame Limit (volume % in air):	Not determined		
Lower Flame Limit (volume % in air):	Not determined		

10. STABILITY AND REACTIVITY

Normally Stable:	Stable under normal storage conditions. Conditions to Avoid: >80 °F(26.7 °C) temperature Avoid moisture, Avoid direct sunlight, Avoid excessive temperatures.
Incompatibilities:	Do not contaminate with any material. Contamination with BioBased® A - Component may cause a reaction generating pressure that could cause a closed container to explode. Product may also react violently with oxidizing agents and acids.
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, nitrogen oxides and organic residues
Hazardous Polymerization:	Will not occur. However mixture with BioBased® A - Component may result in a violent reaction. – Always follow product use instructions.

MSDS – 2001 NB by BioBased Insulation® B – Component

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Ingestion may cause gastrointestinal disturbances. Information on Fluorocarbons: At levels above their recommended exposure limit, the fluorocarbon acts as a weak narcotic. Acute overexposure causes tremors, confusion, irritation, suffocation, and may result in cardiac arrest. Information on Diethylaminoethanol: Diethylaminoethanol is extremely irritating to the skins, eyes. Direct contact with the liquid is corrosive. Acute inhalation exposures at high concentrations have been known to produce respiratory difficulties, loss of coordination and decreased motor activity in rats.
Eye Irritation:	Considered a severe irritant, possibly corrosive, based on ingredient data.
Skin Irritation:	Considered an irritant and may be absorbed in harmful quantities.
Respiratory Contact	Considered an irritant.
Chronic data:	No data available.

12. ECOLOGICAL INFORMATION

No data available on product. Avoid contact with natural waterways and soils.

13. DISPOSAL CONSIDERATIONS

RCRA

Is the unused product a RCRA hazardous waste if discarded?	No
If yes, the RCRA ID number is:	-----

The information offered in Section 13 is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

Other Disposal Considerations:	Liquid product should be incinerated in a licensed facility in accordance with local, state and federal regulations. Do not discharge to waterways or sewer systems or dispose of on the ground. Under no circumstances should a torch, welder, plasma cutter or similar tool capable of producing an arc be used on an empty container regardless of the whether the container has been rinsed or cleaned. Containers should be punctured with a non-sparking tool and disposed of in a licensed facility or landfill.
---------------------------------------	---

14. TRANSPORT INFORMATION

Shipping Name:	Not regulated
UN ID Number"	Not applicable
Packing Group	Not applicable
US DOT Hazard Class:	Not regulated
Canadian TDG Hazard Class:	Not regulated
IMDG Hazard Class (sea):	Not regulated
IATA Hazard Class (air):	Not regulated

MSDS – 2001 NB by BioBased Insulation® B – Component

15. REGULATORY INFORMATION

Toxic Substances Control Act (TSCA)

TSCA Inventory Status:	Ingredients listed on TSCA Chemical Inventory
Other TSCA Issues:	None

SARA Title III/CERCLA

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

Ingredient	SARA/CERCLA RQ (lb)	SARA EHS TPQ (lb)
No ingredients listed in this section.		

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee.

SARA 311 Hazard Class: Immediate, Delayed

SARA 313 Toxic Chemicals:

The following ingredients are SARA 313 "Toxic Chemicals" and may be subject to annual reporting requirements. CAS numbers and weight percents are found in Section 2.

Ingredient	Comment

State Right-To-Know

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

Ingredient	Weight %	Comment

Additional Regulatory Information: None

16. OTHER INFORMATION

Current Issue Date:	November 23, 2009
Previous Issue Date:	None
Changes from previous Issue Date:	None
Other Product Information:	None

Hazard Ratings

HMIS (III)	NFPA
Health – 1	Health – 1
Flammability – 1	Flammability – 1
Physical Hazard – 1	Instability – 1

MSDS – 2001 NB by BioBased Insulation® B – Component

The technical data contained herein is true and accurate to the best of BioBased® Insulation, LLC's knowledge on the date of publication. The technical data is subject to change, however, and the user should contact BioBased® Insulation, LLC to verify that the technical data is current. In addition, the technical data is provided for your guidance only. Because many factors can affect the processing or application of the product and/or its use, it is the user's responsibility to test the product to determine its suitability for the user's intended use. The sale and use of this product is subject to all of the terms and conditions set forth in the BioBased® Insulations sales order, including the LIMITED WARRANTY, DISCLAIMER OF WARRANTY AND RELEASE, and EXCLUSION OF CONSEQUENTIAL AND OTHER DAMAGES. This technical data does not create an express warranty of any kind. The only warranty applicable to this product is the written, limited express warranty contained in the BioBased® Insulations sales order, which is extended to the purchaser only.