



FOAM PACKAGING SYSTEMS

7370 OPPORTUNITY ROAD, SUITE U SAN DIEGO CA 92111
TEL: 858-279-3569 FAX: 858-279-3570 EMAIL: ezflow@usa.com



MATERIAL SAFETY DATA SHEET for green 40 B

Effective Date: 11/11/08

Emergency Telephone Numbers: Infotrac (800)535-5053
or E-Z Flow Foam Systems (858) 279-3569

1. Product Identification

Synonyms: No Data

Molecular Weight: Blend

Chemical Formula: Mixture

Chemical Family: Polyol

Product Name: Botanithane green 40 B

2. Composition/Information on Ingredients

Ingredient CAS No Percent Hazardous

Proprietary Blend 100

3. Hazards Identification

Emergency Overview

No Data

Potential Health Effects

Primary routes of entry: Eye, Skin, Ingestion and Inhalation.

Eye contact: May cause irritation

Skin: May cause irritation

Ingestion: May result in gastric disturbances, diarrhea and weakness.

Inhalation: None anticipated, but vapor inhalation should be avoided

4. First Aid Measures

Splash (eyes): Flush immediately with copious quantities of running water for at least 15 minutes. Consult physician.

Splash (skin): Wash affected area with soap and water. If irritation develops, consult physician.

Ingestion: Dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if victim is unconscious or having convulsions. Consult physician.

Inhalation: Remove to fresh air; aid in breathing and if necessary, consult physician

5. Fire Fighting Measures

Flash Point (Test Method): 160°C C.O.C. Auto ignition: N/A

Flammability Limits in Air (% by Vol): Lower-N/A Upper-N/A

Extinguishing Media: Use Water Fog, Foam CO₂ or Dry Chemical Extinguishing Media

Unusual Fire and Explosion Hazards: None under normal conditions

Special Fire fighting Procedures: Fire fighters should be equipped with self-contained breathing apparatus and turnout gear.

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6. Accidental Release Measures

Spill and Leak Procedures: Spills should be contained, absorb in absorbent sweeping cleaning compound. Flush with water.

7. Handling and Storage

No Data

8. Exposure Controls/Personal Protection

Respiratory Protection: None needed at normal temperatures. If vapors are generated, wear an organic vapor respirator as necessary.

Ventilation: Use local exhaust to maintain work area below PEL and TVL

Protective Clothing: Rubber gloves, coveralls, apron, boots as necessary to prevent skin contact.

Eye Protection: Safety Goggles recommended.

Other Protective Equipment: No Special requirements, avoid contact with skin as required by normal good hygiene practices.

Hygienic Practices: Remove and wash contaminated clothing before re-use. Wash hands with soap and water.

9. Physical and Chemical Properties

Boiling-Melting Point @760 MM Hg: N/A ph: 6-7

Specific Gravity or Bulk Density: N/A Vapor Pressure MM Hg @20°C: N/A

Evaporation Rate (Butyl Acetate=1): N/A Solubility in Water: Slight

Appearance, Odor & Intensity: Liquid; clear; Slight

10. Stability and Reactivity

Stability: Stable

Hazardous Decomposition Products: CO, CO₂, other organic compounds, trace of nitrogen oxides.

Incompatibility (chemicals to avoid): Oxidizing materials.

Hazardous Polymerization: Does not occur.

11. Toxicological Information

No Data

12. Ecological Information

Environmental Fate: No Data

Environmental Toxicity: No Data

13. Disposal Considerations

Waste Disposal Method: Incinerate or bury in a licensed facility. Do not discharge into waterway or sewer system without proper authority.

Hazardous Waste 40 CFR 261: No Hazardous Waste Number:

Container Disposal: Dispose of in licensed facility. Recommend crushing or other means to prevent unauthorized reuse.

14. Transport Information

No Data

15. Regulatory Information

No Data

16. Other Information

HMIS Hazardous Rating: Category HMIS

Acute Health 2

Flammability 1

Reactivity 0

This product is not hazardous according to the OSHA Hazard Communication Standard.

Disclaimer:

We believe that the information contained in this MSDS is current. Since the use of this information and the conditions of the use of the product are not within our control, it is the user's obligation to determine the conditions of safe use of this product. The information herein is given in good faith, but no warranty, expressed or implied, is made.



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Botanithane **green 40** is an environmentally friendly two component packaging system.

Typical Physical Properties for Botanithane **green 40 :**

Viscosity

Part A	(Cps)	200
Part B	(Cps)	30

Density

Part A	(Sg)	1.21
Part B	(Sg)	0.99
Mixed	(Sg)	0.40

Mix Ratio (PBV) 1 to 1

Crepe Time (Sec) 3 to 7

Tack Free Time (Sec) 30 to 40

Operational Temp.(°F) 95-110

Recommended equipment settings for Botanithane **green 40 :**

The Hose Temperature for the A-Side is 95-110°F. (Recommended: 105°)

The Hose Temperature for the B-Side is 100-120°F. (Recommended: 115°)

Pressure with an E-Z Flow standard Impingement Gun is 200 PSI.

Shelf Life and Storage of Botanithane **green 40 :**

The shelf life for Botanithane **green 40** is six months in factory delivered unopened containers. Keep away from extreme heat, cold, and moisture. Maintain at a proper storage temperature of 40°F - 100°F.

Botanithane **green 40** is available for purchase in 15 gallon pails, 55 gallon drums, and 270 gallon totes.

Please refer to the product's Material Safety Data Sheet for shipping, safety, handling, and regulatory information.



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MATERIAL SAFETY DATA SHEET for green 40 A

Effective Date: 11/11/08

Emergency Telephone Numbers: Infotrac (800)535-5053
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SECTION I

Supplier: E-Z Flow Foam Systems
7370 Opportunity Rd, Ste U, San Diego CA 92111
Tel: 858-279-3569 FAX: 858-279-3570

Chemical Name: Botanithane "A"
Trade Name: Botanithane, Component "A"
Chemical Family: Polymeric Isocyanate

SECTION II — Composition / Information on Ingredients

Hazardous Mixtures of Other Liquids, Solids, or Gases	%	TLV (Units)
DIPHENYLMETHANE DIISOCYANATE	55	0.02 PPM
HIGHER POLYMERS OF SIMILAR STRUCTURE	45	
HALOGENATED FIRE RETARDANT	0	

SECTION III — Physical Data

BOILING POINT @ 5 mm HG 406	208° C	SPECIFIC GRAVITY (H ₂ O=1)	1.24
VAPOR PRESSURE (mm. Hg.) @ 25° C	1x10 ⁻³	PERCENT VOLATILE	
VAPOR DENSITY (Air=1)		EVAPORATION RATE	
SOLUBILITY IN WATER:	Insoluble		
APPEARANCE AND ODOR:	<i>Brown Viscous liquid- Odor, very slightly aromatic</i>		

SECTION IV — Fire And Explosion Hazard Data

FLASH POINT (METHOD USED): 415° F (213° C) C.O.C.					
FLAMMABLE LIMITS: Fire Point	450° F	LEL	232° C	UEL	C.O.C.
EXTINGUISHING MEDIA: CO ₂ , Dry Chemical, Foam or Water Fog may be used					

SPECIAL FIRE FIGHTING PROCEDURES: The usual fireman's body protection should be worn as well as a self-contained breathing apparatus to protect from vapors formed by the product

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

SECTION V — Health Hazard Data

THRESHOLD LIMIT VALUE:

0.02 ppm for Diphenylmethane Diisocyanate.

EFFECTS OF OVER EXPOSURE:

Chest, irritation or respiratory tract, coughing, headache, shortness of breathe. Exposure can lead to allergenic sensitivity.

EMERGENCY AND FIRST AID PROCEDURES:

Skin--wash with soap and water at least 5 minutes.

Eye-- wash with large amounts of water for a minimum of 15 minutes, consult eye physician.

Ingestion-- induce vomiting and consult physician.

Inhalation-- remove to uncontaminated area and administer oxygen by authorized person, if necessary.

SECTION VI — Reactivity Data

STABILITY:	UNSTABLE		CONDITIONS TO AVOID: 50° C (121° F) or below 0° (32° F)
	STABLE		
INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contact with water, alcohols, strong bases, metal compounds or surface active materials.			
HAZARDOUS DECOMPOSITION PRODUCTS:			
HAZARDOUS POLYMERIZATION:	MAY OCCUR		CONDITIONS TO AVOID: Contact with moisture and other materials which react with isocyanates.
	WILL NOT OCCUR	X	

SECTION VII — Spill or Leak Procedures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Absorb in an absorbent sweeping/cleaning compound (e.g. "Oil-Dry") remove from area in open drums treat with water containing 1% ammonia before disposal.

WASTE DISPOSAL METHOD:

Disposal should be in accordance with federal, state, and local regulations regarding environmental control.

SECTION VIII — Special Protection Information

RESPIRATORY PROTECTION :

Canister type gas masks equipped for organic vapors; masks supplied from external air sources; self-contained breathing equipment.

VENTILATION:**LOCAL EXHAUST:**

To maintain vapor concentration below TLV.

MECHANICAL:**SPECIAL:****OTHER:**

PROTECTIVE GLOVES: Chemically resistant rubber or plastic gloves

EYE PROTECTION: Chemical safety goggles.

OTHER PROTECTION: Safety Showers and Eye-Wash stations should be available.

SECTION IX — Special Precautions

PRECAUTION TO BE TAKEN IN HANDLING AND STORING:

This Isocyanate should be protected in a dry atmosphere and maintained at 65°-79° F.

SECTION X — Other Information

HMIS Hazardous Rating: Category HMIS

Acute Health - 3

Flammability - 0

Reactivity - 0

This product is not hazardous according to the OSHA Hazard Communication Standard.

DISCLAIMER:

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for and damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of this product.

Prepared By: James R. Train

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