MATERIAL SAFETY DATA SHEET

PREMIER BUILDING SOLUTIONS, INC..

Version: 1.2
Revision Date: 01/07/2013

XTRAFOAM ONE COMPONENT POLYURETHANE FOAM SEALANT/ADHESIVE

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Brand Name: XtraFoam
Product Use: Polyurethane Foam Sealant & Adhesive

NFPA: Fire 3; Health 2; Reactivity 1
HMIS: Flammability 3; Health 2; Reactivity 1

Note: NFPA = National Fire Protection Association

Company Contact Information	**Emergency Telephone Number**
Premier Building Solutions, Inc. 480 Nova Drive Massillon, OH. 44646	CHEMTREC: 800-424-9300 (24 hours) Telephone: 866-512-4583

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Product is a liquid urethane prepolymer mixture that is packaged under pressure (Flammable Compressed Gas). Containers should not be heated above 120°F (49°C) to avoid excessive pressure build-up.

Physical Hazards

Danger! Extremely Flammable. Since the containers are pressurized, storage temperature should not exceed 120°F (49°C) in order to avoid excessive pressure build-up and possible container rupture. Also, the foam has strong adhesive-like characteristics and will adhere aggressively to skin and other surfaces. If accidental foam contact occurs, follow the appropriate first-aid procedure described in Section 4 of this MSDS.

Potential Health Effects

The primary adverse health effects of this product are related to the Polymeric Isocyanate (MDI) component, and, to a lesser degree, the Liquefied Petroleum Gas (Hydrocarbon, HC) component. Therefore, adequate ventilation should be provided to avoid exceeding the exposure limits of these components (See Section 8). The likelihood of exceeding these limits are low due to the low concentration of vapor produced during normal use. However, if used indoors, mechanical ventilation or exhaust should be provided during use and until product is cured.

Acute Effects

Eye:	May be irritating to eyes. Foam contact can cause physical damage due to adhesive character.
Skin:	May cause localized irritation, reddening or swelling. Prolonged or repeated exposure may lead to sensitization and/or contact dermatitis.
Inhalation:	May irritate mucous membranes with tightness in chest, coughing, or allergic asthma-like sensitivity. Extensive overexposure can lead to respiratory symptoms like bronchitis and pulmonary edema. These effects are usually reversible. Overexposure to Liquefied Petroleum Gas (Hydrocarbon, HC) may cause lightheadedness, headaches, or lethargy. Persons with cardiac arrhythmia may be at increased risk in severe exposure.
Oral:	May cause irritation of mucous membranes in the mouth and digestive tract

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number	Wt %	Component Name
101-68-8	**5-10**	**4,4' Diphenylmethane Diisocyanate**
9016-87-9	**5-10**	**MDI Oligomers**
N/A	**40-60**	**Proprietary Urethane Blend**
74-28-5	**5-10**	**Isobutane**
115-10-6	**5-10**	**Dimethyl Ether**
74-98-6	**1-5**	**Propane**

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4. FIRST AID MEASURES

Eye:	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 – 20 minutes while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately obtain medical attention.
Skin:	Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Flush with lukewarm gently flowing water for 15 minutes. If irritation persists, repeat flushing. If irritation persists, obtain medical advice.
Inhalation:	Material is not likely to present an inhalation hazard at ambient conditions. If material is heated or vapor is generated, care should be taken to prevent inhalation. In case of exposure to vapor, move to fresh air.
Oral:	Never give anything by mouth if victim is rapidly losing consciousness or convulsing. DO NOT INDUCE VOMITING. Have victim drink 2 to 8 oz. (60 to 240 mL) of water. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Have victim rinse mouth with water again. Obtain medical attention.

Note to Physician: Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Dry chemical, carbon dioxide, Halon 1211, Chemical Foams, or water spray (If used in large quantities)

Firefighting Procedures: Isolate area and deny unnecessary entry. Stay upwind. Water is not recommended unless used in large quantities as a fine spray when other extinguishing agents are unavailable. Water may spread the fire. Wear self-contained breathing apparatus to protect against toxic decomposition by-products, including Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides, Hydrogen Fluoride, and traces of Hydrogen Cyanide. Wear all turn out gear (boots, trousers, helmet, gloves, and hood.

Unusual Fire/ Explosion Hazards:

Contains Flammable Propellant. Eliminate ignition sources. High temperatures will raise the pressure in the containers which may lead to rupturing. Aerosol cans exposed to fire or high temperature can rupture and rocket. Cured foam is organic and, therefore, will burn in the presence of sufficient heat.Dense smoke is produced when product is burned. Avoid welding or other forms of “hot work” in the vicinity of exposed cured foam.

6. ACCIDENTAL RELEASE MEASURES

Read all product instructions before using. Personal protective equipment should include (impervious gloves, protective eye wear, and suitable work clothes). Uncured product is very sticky, so carefully remove the bulk of the foam by scraping it up and then immediately remove residue with a rag and solvent such as polyurethane cleaner, mineral spirits, acetone (nail polish remover), paint thinner, etc. Once the product has cured, it can only be removed physically by scraping, buffing, etc. Dispose as plastic waste (foam plastic) in accordance with all applicable guidelines and regulations.
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7. HANDLING AND STORAGE

Handling: Extremely flammable aerosol compressed gas. Keep away from sources of heat, sparks, and flame. Remove all ignition sources. Turn off all pilot lights. Do not smoke. Wear proper personal protective equipment when using the product. Use only in a well ventilated area.

Storage: Store in a dry place. Ideal storage temperature is 60□F to 80□F (15.5□C to 26.6□C). Do not expose aerosol cans to open flame or temperatures above 120□F (49□C). Excessive heat can cause premature aging of components resulting in a shorter shelf life. Storage below 55□F (12.7□C) may affect foam quality if chemicals are not warmed to room temperature before using. Protect containers from physical abuse. Always store containers upright. **KEEP AWAY FROM CHILDREN**

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Read all product instructions before using. Personal protective equipment should include (impervious gloves, protective eye wear and suitable work clothes). Adequate ventilation should also be employed so that vapor levels do not exceed recommended guidelines. If vapor levels are expected to exceed these guidelines, use NIOSH approved, positive pressure, supplied air respirator or a negative pressure half mask with organic vapor cartridges and dust/mist pre-filters.

Exercise good personal hygiene and wash hands thoroughly after each use.

Exposure Guidelines	OSHA	ACGIH
4,4' – Diphenylmethane Diisocyanate (MDI)	.020 ppm ceiling .200 mg/m3 ceiling	.005 ppm TWA .051 mg/m3 TWA
Isobutane	1000 ppm TWA	
Dimethyl ether	1000 ppm TWA	1880 mg/m³
Propane	1000 ppm PEL	1000 ppm TWA

Personal Protective Equipment:

Skin Protection:	Avoid contact with skin. Use clothing that protects against dermal exposure.
Suitable Gloves:	Use chemically resistant gloves. Nitrile/butadiene rubber, Butyl Rubber, polyethylene, PVC (vinyl), or neoprene gloves are also effective. Glove selection should take into account potential body reactions to certain materials and manufacturer's instructions for use.
Respiratory Protection::	Use products only in a well ventilated area. If atmospheric levels are expected to exceed the exposure levels, use a NIOSH approved air purifying respirator equipped with an organic vapor cartridge and a particulate filter (N95). If atmospheric levels exceed 10 times the TLV or PEL level for which an air-purifying respirator is effective, use a powered air purifying respirator (PAPR). The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). Use local and general exhaust ventilation to control levels of exposure. The odor and irritancy of this material are inadequate to warn of excessive exposure Suitable Respirator: Respiratory protection is not needed under ambient conditions. If vapor is generated when material is heated or handled, the following is advised. General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.
General Hygiene:	Do not smoke, drink, or eat while handling this product. Always use in a well ventilated area. Wash after handling. Do not breathe vapors. Avoid contact with skin and hands.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical Appearance : Viscous liquid which foams upon release from container as an off-white to yellowish froth. (Note; Appearance may differ with the introduction of a dye or colorant).

Odor : Slight hydrocarbon odor during curing stage.

Specific Gravity : Approximately 1.1 (H2O = 1)

Boiling Point : Liquefied petroleum gas (hydrocarbon, HC) components boil between -28°F to 11°F (-33.3°C to -11.7°C). Other components boil at temperatures greater than 200°F (93.3°C).

Flash Point : -156°F (-104.9°C) estimated based on liquefied petroleum gas (hydrocarbon, HC).

Vapor Pressure : Contents under pressure have vapor pressure greater than 50 psig / 345 kPa. After release from container, vapor pressure is very low (not determined).

Solubility in Water : Insoluble, reacts slowly with water during cure; liberating traces of CO2.

Explosion Data : Contents could be sensitive to mechanical impact or static discharge. Vapors released during and immediately after dispensing may ignite explosively if proper ventilation is not employed and vapor build up is allowed to occur. Extinguish or remove all sources of ignition during dispensing, until product becomes tack free or develops a skin.

VOLATILE ORGANIC COMPOUNDS (VOC): Product complies with State and Federal regulations for VOC content.

10. STABILITY AND REACTITY

Chemical Stability: This product is considered stable under normal and anticipated storage and handling conditions. Do not store above 120°F (49°C). For longest shelf life, avoid storage above 90°F (32.2°C). Avoid alcohols, strong bases or amines and metal compounds (such as small particle metal catalysts).

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11. TOXICOLOGICAL INFORMATION

Acute Toxicity for MDI:
Ingestion: LD50 >5,000 mg/kg (rat, male/female)
Skin: LD50 >5,000 mg/kg (rabbit)
Inhalation: LC50 .49 mg/L (rat) 4 hours

Sensitization
Skin: (rabbit, slightly irritating)
Eye: (rabbit, slightly irritating)

Repeated Dose Toxicity: 2 yrs, Inhalation, NOAEL .19 mg/m^3, (rat, male/female, 6hrs/day, 5days/week) Irritation to lungs and nasal cavity

Chronic Toxicity/ Carcinogenicity: 6.3 mg/m³ (high level of exposure, 2years, 6hrs/day, 5days/week) Lung tumors observed.

Developmental Toxicity: rat, female, 6hrs/day, 12 mg/m³, days 6-15 (gestation period); 4 mg/m³ (maternal/fetotoxicity)

Genetic Toxicity In vitro: Inconclusive, In vitro studies were negative/positive, salmonella typimurium

Acute Toxicity for Hydrocarbon Blend:
Dimethyl Ether: Inhalation: LC50 308.5 mg/L (rat) 4 h
Isobutane: Inhalation: LC50 658 mg/L (rat) 4 h
Propane: LC50 Dermal: 658 mg/kg (rat)

12. ECOLOGICAL CONSIDERATIONS

Eological Data for Polymeric MDI:
Biodegradation: Expected to have a short half-life
Bioaccumulation: Oncorhynchus mykiss (rainbow trout), 112 day exposure, <1 BCF. Does not bioaccumulate.
Acute Toxicity to Fish: LC0: >1000mg/l brachydanio rerio (zebra fish), 96 hour exposure
Acute Toxicity to Aquatic Invertebrates: EC50: >1000 mg/l Daphnia magna (water flea), 24h
Toxicity to Microorganisms: EC50: >100 mg/l, activated sludge, 3h

Ecological Data for MDI
Acute Toxicity to Fish: LC50: >500mg/l brachydanio rerio (zebra fish), 24h
Acute Toxicity to Aquatic Invertebrates: EC50: >500 mg/l Daphnia magna (water flea), 24h

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Ecological Data for Dimethyl ether:
LC50/EC50/EL50 >100mg/L in the most sensitive species
Acute Toxicity to Fish: LC50 >3677 mg/L (gold fish), 96h

13. DISPOSAL CONSIDERATIONS

Do not dispose product into drains, sewers, waterways, groundwater, or soil.

1. DO NOT INCINERATE CONTAINERS
2. Before disposing of containers, relieve container of any remaining foam and pressure. Allow product to fully cure before disposing. Never discard in a liquid state. Always wear safety glasses with side shields or goggles, nitrile gloves, and

clothing that protects against dermal exposure when disposing of product.
3. DISPOSE OF EMPTY CONTAINERS ACCORDING TO APPLICABLE FEDERAL, STATE, PROVINCIAL AND LOCAL REGULATIONS. CHECK WITH YOUR LOCAL WASTE DISPOSAL SERVICE FOR GUIDANCE.

Regulations may vary in different locations. The information only pertains to the product as shipped in its intended condition as described in the MSDS section: Composition.

14. TRANSPORT INFORMATION

Shipping Information:

Ground:	**Consumer Commodity ORM-D Limited Quantity**
Water:	**UN1950 Aerosols, Flammable 2.1 (Flammable Gas Label) LIMITED QUANTITY**
Air:	**UN1950 Aerosols, Flammable 2.1 (Flammable Gas Label) LIMITED QUANTITY**
	Packing Instructions (Cargo & Passenger) 203

NOTE: Emergency Response Guide Numbers – Consumer Commodity #171 for Aerosols

15. REGULATORY INFORMATION

OSHA Hazcom Standard Rating:
Hazardous

WHMIS Classification:
A
D2B

T**oxic Substances Control Act (TSCA)/Domestic Substances List (DSL):**
All ingredients are listed on the TSCA inventory, as well as the Canadian Domestic Substances List.

SARA Title III: Section 311/312:
Acute Health Hazard, Chronic Health Hazard, Fire Hazard, Reactive Hazard, Sudden Release of Pressure Hazard

SARA Title III: Section 313
Contains Diphenylmethane diisocyanate (CAS #101-68-8) and Diphenylmethane diisocyanate, Isomers and homologues (CAS#9016-87-9) which are subject to the reporting requirements of SARA Title III. Applicability must be determined by end user.
State Right-To Know Information: Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:
Chemical Name (common names) CAS Number Percentage
Diphenylmethane diisocyanate 101-68-8 5% to 10 %
Isobutane 75-28-5 5% to 10 %
Propane 115-10-6 1% to 5 %
Dimethyl ether 74-98-6 5% to 10 %

California Proposition 65:
Based on information currently available, this product is not known to contain detectable

amounts of any chemicals currently
listed under California Proposition 65.

16. OTHER INFORMATION

NFPA: Health Hazard 2; Flammability 3; Reactivity 1
HMIS: Health Hazard 2; Flammability 3; Physical Hazard 1

. **Note:** The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.