MATERIAL SAFETY DATA SHEET

PREMIER INDUSTRIAL SUPPLY, INC.

Product Name: ONE COMPONENT POLYURETHANE FOAM SEALANT/ADHESIVE
Date Issued: November 2009

1. Identification

Chemical Product

One Component Polyurethane Foam Sealant/Adhesive

Emergency Overview

Product Information: 1-800-321-5585. In Ohio and outside the United States call (330) 753-4585
Transportation Emergency: CHEMTREC 1-800-424-9300.
International Transportation Emergency: CHEMTREC (703) 527-3887

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

2. Composition

Chemical Name (common names)	CAS Number	Percentage	LD	LC
1,1,1,2-Tetrafluoroethane (Non Flammable Compressed Gas, HFC, Fluorocarbon) 134a	811-97-2	10-30 %	NA	NA
4,4' – Diphenylmethane Diisocyanate (MDI)	101-68-8	5-10 %	NA	NA
Higher Oligomers of MDI (Polymeric MDI)	9016-87-9	5-10 %	NA	NA
Urethane Pre-Polymer Blend (Non-Hazardous Proprietary Blend)	Not Available This Section	6-100 %	NA	NA

(NOTE: See Section 8 of this MSDS for Exposure Guidelines)

3. Hazards Identification

Physical Hazards

Since the containers are pressurized, storage temperature should not exceed 120ºF (49ºC) In order to avoid excessive pressure build up and possible container rupture. Also, the product has strong adhesive-like characteristics and will adhere aggressively to skin and other surfaces. If accidental contact occurs, follow the appropriate first-aid procedure describe in Section 4.

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 Fluorcarbon (134a) 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 is 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.

Entry Route	Effects of Exposure
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 1,1,1,2 - Tetrafluoroethane may cause lightheadedness, headaches, or lethargy. Persons with cardiac arrhythmia may be at increased risk in severe exposure.
Eyes:	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.
Ingestion:	May cause irritation of mucous membranes in the mouth and digestive tract.

4. First Aid

Inhalation:	If breathing difficulty is experienced, move to area free of exposure. Provide fresh air. If necessary, provide oxygen or artificial respiration by trained personnel and obtain medical attention.
Eye Contact:	Flush with clean water for at least 15 minutes and obtain medical attention.
Skin Contact:	Use a rag to remove excess foam from skin and remove contaminated clothing. Use of a solvent, such as acetone (nail polish remover) or mineral spirits, may help in removing uncured foam residue from clothing or other surfaces (avoid eye contact). Cured foam may be physically removed by persistent washing with soap and water. If irritation develops, use mild skin cream. If irritation persists, obtain medical attention.
Ingestion:	Drink 1-3 glasses of water and seek immediate medical attention. Never give anything orally to an unconscious person.

5. Fire Fighting Measures

High temperatures will raise the pressure in the containers, which may lead to rupturing. Extinguishing media include: dry chemical, carbon dioxide, Halon 1211, chemical foam, or water spray if used in large quantities (water contamination will produce carbon dioxide). Wear self-contained breathing apparatus to protect against toxic decomposition by-products, including CO, Co2, NO, and traces of HCN. Cured foam is organic and, therefore, will burn in the presence of sufficient heat, oxygen and an ignition source. Main hazards associated with burning foam are similar to burning of other organic materials (wood, paper, etc.) and precautions against exposure should be taken accordingly. Avoid welding or other “hot work” in the vicinity of exposed cured foam.

6. Accidental Release Measures/Disposal Considerations

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.

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.

7. Handling and Storage

Store in a cool, dry place. Ideal storage temperature is 60º F – 80º F (15.5ºC-26.6ºC). Storage above 90º F (32.2º) will shorten the shelf life. Storage below 55ºF (12.7ºC) may affect foam quality if chemicals are not warmed before using. Protect containers from physical abuse. Protect unused product from freezing.

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, was thoroughly after each use.

Exposure Guidelines	**OSHA**	**ACGIH**
4,4'-Diphenylmethane Diisocyanate (MDI)	.020 ppm ceiling .200 mg/m ceiling	.005 ppm TWA .051 mg/m TWA
Higher Oligomers of MDI	None Established	None Established
1,1,1,2-Tetrafluoroethane (Non Flammable Compressed Gas, HFC Fluorocarbon 134a)	None Established	None Established

(None of the components in this product are listed by IARC, NTP, OSHA or ACGIH as a carcinogen)

9. Physical and Chemical Properties

Physical Appearance: Viscous liquid which foams upon release from container as an off-white Yellowish froth (Note: Appearance may differ with the introduction of Dye or colorant.

Odor: Slight Flourocarbon odor during curing stage.

Specific Gravity: Approximately 1.2 (H2O = 1)

Boiling Point: 1,1,1,2 – Tetrafluorocarbon (Non-Flammable Compressed Gas, HFC Fluorocarbon 134a) boils at -15ºF (-26.1ºC).

Flash Point: Product flash point has been tested at approximately 800ºF (426.6ºC).

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 Co2.

Explosion Data: Contents are not known to be sensitive to mechanical impact or static discharge.

10. Stability and Reactivity

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

11. Transportation

Shipping Information

	Containers Less Than 1000 cu. Cm (1 Liter)	Containers Greater Than 1000 cu. Cm (1 Liter)
Ground	Consumer Commodity ORM-D (On Shipper Carton) Consumer Commodity Polyurethane Foam Sealant/Adhesive (On Shipping Document)	UN1956 Compressed Gas n.o.s. (Fluorcarbon) 2.2 (Non-flammable Gas Label)
Air	UN1950 Aerosols, Non-Flammable 2.2 (Non-flammable Gas Label)	UN1956 Compressed Gas n.o.s (Fluorcarbon) 2.2 (Non-flammable Gas Label)
Water	UN1950 AEROSOLS "LTD QTY" 2 Q	UN1956 Compressed Gas n.o.s.(Fluorcarbon) 2.2
Exceptions		NONE

Note Emergency Response Guide Numbers – Consumer Commodity # 171. For Aerosols and Compressed Gas # 126.

12. Regulatory

Toxic 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:
Contains Diphenylmethane Diisocyanate (CAS #101-68-8) subject to the reporting requirements of SARA Title III. Applicability must be determined by the end user.

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.

V.O.C. Content
Based on the current EPA definition of volatile organic compound, this product does not have any V.O.C. content.

13. Other

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

Disclaimer: The opinions expressed herein are those of qualified experts within Premier Industrial Supply, Inc. We believe the information contained herein is current as the date of this MSDS. Since the use of the product is not within the control of Premier Industrial Supply Inc. it is the user's obligation to determine the conditions of safe use.

PREPARED BY: Premier Industrial Supply, Inc.

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