ONE-COMPONENT POLYURETHANE FOAM SEALANT/ADHESIVE

(Includes Straw Foam, Gun Foam and Construction Adhesive)

A16174

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MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Chemical Product

One-Component Polyurethane Foam Sealant/Adhesive

Manufacturer

FOMO PRODUCTS, INC.
P. O. Box 1078
Norton, Ohio 44203

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. One-Component Polyurethane Foam Sealant/Adhesive is registered by the manufacturer, FOMO PRODUCTS, INC.
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 120°F (49°C) to avoid excessive pressure build-up.

2. COMPOSITION

Chemical Name (common names)	CAS Number	Percentage	LD_{50}	LC_{50}
Fluorocarbon (Non-Flammable Compressed Gas, HCFC)	75-45-6	10 to 30 percent	N/A	N/A
4,4' - Diphenylmethane Diisocyanate (MDI)	101-68-8	5 to 10 percent	NA	NA
Higher Oligomers of MDI (Polymeric MDI)	9016-87-9	5 to 10 percent	NA	NA
Urethane Pre-polymer Blend (Non-Hazardous Proprietary Blend)	Not Available This Section	60 to 100 percent	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 120°F (49°C) 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 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 Fluorocarbon (Non-Flammable Gas) 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.

Entry Route: Effects of Overexposure

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 Fluorocarbon 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 to 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, CO_2, 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, cotton, 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 60°F to 80°F (15.5°C to 26.6°C). Storage above 90°F (32.2°C) will shorten the shelf life. Storage below 55°F (12.7°C) 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, wash thoroughly after each use.

Exposure Guidelines	OSHA	ACGIH
4,4' – Diphenylmethane Diisocyanate (MDI)	.020 ppm ceiling .200 mg/m^3 ceiling	.005 ppm TWA .051 mg/m^3 TWA
Higher Oligomers of MDI	None Established	None Established
Fluorocarbon (Non-Flammable Compressed Gas, HCFC)	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 to yellowish froth. (Note; Appearance may differ with the introduction of a dye or colorant).
Odor	:	Slight fluorocarbon odor during curing stage
Specific Gravity	:	Approximately 1.2 (H_2O = 1)
Boiling Point	:	Fluorocarbon (Non-Flammable Compressed Gas, HCFC) boils at 0°F (-17.7°C). Other components boil at temperatures greater than 200°F (93.3°C).
Flash Point	:	Product flash point has been tested at approximately 800°F (426.6°C).
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 CO_2.
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 above 120°F (49°C). For longest shelf life, avoid storage above 80°F (26.6°C). Avoid alcohols, strong bases or amines and metal compounds (such as small particle metal catalysts).

11. TRANSPORTATION

Shipping Information

	Containers 1000 cu. cm. (1 liter) or Less
Ground	Consumer Commodity ORM-D (On Shipper Carton) Consumer Commodity, Polyurethane Foam Sealant (On Shipping Document)
Air	UN 1950 Aerosols, Non-Flammable 2.2 (Non-Flammable Gas Label)
Water	UN 1950 AEROSOLS (Limited Quantity) Class 2 No Hazard Labels Required)Boxes or Cartons should be marked (AEROSOLS UN 1950) only. IMDG Volume #2, Page 93
Exceptions	N/A
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) and Fluorocarbon (HCFC) containing Chlorodifluoromethane (CAS#75-45-6), which are 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**

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APPROVED BY : T. EBERLING
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