

MATERIAL SAFETY DATA SHEET

Date Revised: 1/14/10
Sealant Foam

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SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: Sealant Foam
Product Numbers: 100654
Product Use: Urethane Foam

Company

ITW Evercoat
a Division of Illinois Tool Works Inc.
6600 Cornell Road
Cincinnati, Ohio USA
Phone: 513-489-7600

Emergency Telephone Numbers:

CHEMTREC: 1-800-424-9300
CANUTEC: 1-613-996-6666

Prepared By: Safety Department

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient(s)</u>	<u>CAS Number</u>	<u>EINECS Number</u>	<u>% (by weight)</u>
Polyurethane Resin	Proprietary	Proprietary	50 – 85
Chlorodifluoromethane (HCFC-22)	75-45-6	203-625-9	15 – 30
Methylene Bisphenyl Isocyanate (MDI)	101-68-8	202-966-0	5 – 15

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER! CONTENTS UNDER PRESSURE. VAPOR AND SPRAY MIST HARMFUL. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. OVEREXPOSURE MAY CAUSE LUNG DAMAGE. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION, EFFECTS MAY BE PERMANENT. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS OR PRIOR REACTION TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOR OR SPRAY MIST.

Potential Health Effects

Acute Effects (Short Term):

Eye: Contact with liquid or vapor may result in irritation, redness, tearing, blurred vision and mild corneal opacity due to adhesive character.

Skin: May cause skin irritation. Prolonged or repeated contact may dry the skin. May cause allergic skin reaction, effects may be permanent. Symptoms may include redness, swelling, burning,

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drying and cracking of skin, and skin burns. Contact of liquid HCFC-22 with skin may cause tissue to freeze (frost bite).

Swallowing: Ingestion of this material may cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Aspiration of this material into the lungs due to vomiting may produce chemical pneumonitis which can be fatal.

Inhalation: Excessive inhalation of vapors may cause nasal and respiratory irritation, acute nervous system depression, fatigue, weakness, nausea, headache, and dizziness. Other effects may include breathlessness, chest discomfort, difficulty breathing, reduced pulmonary function and allergic asthma-like sensitivity. Airborne overexposure well above the PEL may result additionally in eye irritation, headache, chemical bronchitis, asthma-like findings or pulmonary edema. Short term effects from exposure to HCFC-22 may increase the sensitivity of the heart to adrenalin, possibly resulting in rapid heartbeat, irregular heartbeat, and depression of cardiac function. Inhaling concentrated HCFC-22 can cause lightheadedness, headaches, or lethargy. Person with cardiac arrhythmia may be at increased risk in severe exposure. May cause allergic respiratory reaction, effects may be permanent. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

Chronic Effects of Overexposure (Long Term):

Isocyanates: This substance may cause effects on the lungs, resulting in impaired functions. Repeated or prolonged contact may cause skin and respiratory sensitization. Repeated or prolonged inhalation exposure may cause asthma. The symptoms of asthma often do not become manifest until a few hours have passed and they are aggravated by physical effort. Anyone who has shown symptoms of asthma due to this substance should avoid all further contact with this substance.

Cancer Information: This product does not contain any substance, which is listed as a carcinogen by NTP, IARC or OSHA in quantities greater than 0.1%.

Other Health Effects: NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Primary Route(s) of Entry: Inhalation, Skin contact, Eye contact, Ingestion, Skin absorption.

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SECTION 4. FIRST AID MEASURES

- Eyes:** Flush eyes gently with water for at least 15 minutes. Seek immediate medical attention.
- Skin:** If frostbitten, warm skin slowly with water. Immediately remove wet material from skin with acetone. Dried foam is hard to remove from skin. Do not attempt to remove dried foam with solvents. Generously apply petroleum jelly or lanolin, leave for one hour, wash thoroughly, and repeat until foam is removed. Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.
- Swallowing:** Consult a physician or poison control center immediately. DO NOT INDUCE VOMITING. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. If possible, do not leave individual unattended.
- Inhalation:** If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, oxygen may be beneficial if administered by trained personnel.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point: >400 °F (°C)
Explosive Limit: Lower: N/D **Upper:** N/D
Autoignition Temperature: 464 °F (240 °C)
OSHA Flammability Class: Combustible Liquid Class IIIB

Hazardous Products of Combustion: May form toxic and corrosive gases: carbon dioxide, carbon monoxide, nitrogen oxides, traces of hydrochloric acid

Fire and Explosion Hazards: Polymerization of material may occur under fire conditions. Polymerization of material in a closed container can create pressure build-up, which may cause rupture of container. This material is water reactive. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Cured material is also combustible.

Extinguishing Media: water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions: Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus NIOSH

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approved with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

NFPA Rating: Health - 3, Flammability - 0, Reactivity - 1

SECTION 6. ACCIDENTAL RELEASE MEASURES

In Case of Spill: Ventilate the area. Wear proper protective equipment (Section 8). Avoid breathing vapors. Allow foam to cure (harden) and dispose of properly.

SECTION 7. HANDLING AND STORAGE

Handling: All hazard precautions given in the data sheet must be observed. Avoid contact with eyes, skin and clothing. Immediately remove wet material from skin with acetone. Dried foam is hard to remove from skin. Do not attempt to remove dried foam with solvents. Generously apply petroleum jelly or lanolin, leave for one hour, wash thoroughly, and repeat until foam is removed. Wash thoroughly after handling. Use only with adequate ventilation. Do not breathe vapors or spray mist. Do not take internally. Close container after each use. **Keep out of reach of children.**

Storage: Store material in a cool, well-ventilated area. Do not store above 120° F (49° C). For maximum product quality, avoid prolonged storage at temperatures above 75°F (25°C). Do not use or store near heat, sparks, or open flame. Do not store in auto or direct sunlight. Store upright. Keep container tightly closed. Avoid contact with incompatible materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Chemical splash goggles in compliance with OSHA regulations are recommended.

Skin Protection: Protective gloves and proper clothing should be worn to prevent skin contact. Gloves should be made of neoprene or natural rubber. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Protection: Use a NIOSH approved respirator designed to remove particulate matter and organic solvent vapors.

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below acceptable limits. Explosion-proof ventilation system is acceptable.

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Exposure Guidelines:

Hazardous Ingredients	CAS Number	OSHA PEL/TWA	ACGIH TLV
Methylene Bisphenyl Isocyanate	101-68-8	0.02 ppm C	0.005 ppm
Chlorodifluoromethane (HCFC-22)	75-45-6	1000 ppm	1000 ppm

C-Ceiling

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	-41.4 °F/ -40.8 °C	Vapor Density:	Heavier than air.
Specific Gravity / Density:	1.1/ 9.16 lbs/gal	Percent Volatiles by volume:	N/E
Evaporation Rate:	N/E	Physical State:	Liquid under pressure
Melting Point:	N/E	pH:	Neutral
Odor:	Faint ether-like odor.	Solubility:	Insoluble in water, reaction
Vapor Pressure:	136 psia @ 68 °F/20 °C	Appearance:	Yellow Liquid
Octanol/Water Partition	Unknown	VOC (material):	N/E

SECTION 10. STABILITY AND REACTIVITY

Hazardous Polymerization: Product may undergo hazardous polymerization if exposed to extreme heat.

Hazardous Decomposition: May form toxic and corrosive gases: carbon dioxide, carbon monoxide, nitrogen oxides, traces of hydrochloric acid.

Chemical Stability: Stable under normal handling conditions. Reacts readily with water to form insoluble polyureas. Cured foam will deteriorate when exposed to UV light.

Incompatibility: Avoid contact in uncontrolled conditions with: water, strong acids, strong oxidizing agents, alcohols, amines, finely powdered metals such as aluminum and zinc, and strong bases.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity Data:

Ingredient	CAS #	LD ₅₀ Oral-Rat	LC ₅₀ Inhalation-Rat
Methylene Bisphenyl Isocyanate	101-68-8	N/E	178 mg/m ³

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Chlorodifluoromethane (HCFC-22)	75-45-6	N/E	35 pph/20M
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N/E-Not Established

Carcinogenicity: See Cancer Information, Section 3.

Mutagenicity: No significant evidence found.

Teratogenicity: No significant evidence found.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: This product should not be released to sewage, draining systems or any body of water exceeding concentrations of approved limits under applicable regulations and permits.

SECTION 13. DISPOSAL CONSIDERATION

RCRA Hazardous Waste: This material as supplied, if discarded, would be regulated as a hazardous waste under RCRA (40 CFR 261). Dispose of in accordance with applicable federal, state, and local regulations. Do not incinerate.

RCRA Hazard Class: This material would be regulated as EPA Hazardous Waste Number D003 based on the characteristic of reactivity.

SECTION 14. TRANSPORT INFORMATION

DOT Description: The DOT Classification for shipping is dependant on quantity, type of packaging (a kit may include other components), or method of shipment.

SECTION 15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (USA) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a)

Component _____ RQ (lbs.)

Methylene Bisphenyl Isocyanate 5000

SARA Title III: Section 302- Extremely Hazardous Substances

None

SARA Title III: Section 313- Toxic Chemical List

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<u>Component</u>	<u>CAS Number</u>	<u>Percentage</u>
Methylene Bisphenyl Isocyanate	101-68-8	5 - 15%
Chlorodifluoromethane (HCFC-22)	75-45-6	15 - 30%

International Regulations

EINECS (Europe) The intentional ingredients of this product are listed.

DSL (Canada) The intentional ingredients of this product are listed.

WHMIS Classification

Health Hazard: D1A, D2B (Toxic Effects and Other Toxic Effects)

Physical Hazard:

State and Local Regulations

California Proposition 65:

This product contains the following chemical(s) known to the state of California to cause cancer. NONE.

This product contains the following chemical(s) known to the state of California to cause birth defects or reproductive harm. NONE

SECTION 16. OTHER INFORMATION

HMIS Rating: Health – 3*, Flammability - 0, Reactivity - 1
Key- 0=Least, 1=Slight, 2=Moderate, 3=Serious, 4=Extreme, *=Chronic Effects

Additional Information may be obtained by calling the Evercoat MSDS Hotline at 1-800-729-7600.

NOTICE: The information accumulated herein is believed to be correct as of the date issued from sources, which are believed to be accurate and reliable. Since it is not possible to anticipate all circumstances of use, recipients are advised to confirm, in advance of need, that the information is current, applicable and suitable to their circumstances.