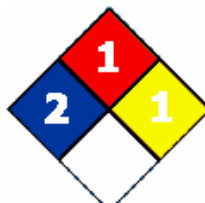




Material Safety Data Sheet

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td>2*</td> </tr> <tr> <td>Fire Hazard</td> <td>1</td> </tr> <tr> <td>Reactivity</td> <td>1</td> </tr> </table>	Health Hazard	2*	Fire Hazard	1	Reactivity	1		
Health Hazard	2*								
Fire Hazard	1								
Reactivity	1								

Issuing Date 27-Feb-2007

Revision Date NOT AUTHORIZED

Revision Number NOT AUTHORIZED

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Component A for
Touch 'n Seal Foam Kit (3pcf)

Recommended Use Insulation

Supplier Address
Seal Design
2965 LaVanture Place • Elkhart, IN 46514
Phone: 574-970-4841 • Fax: 574-970-4843
www.sealdesignllc.com

Emergency Telephone Number Chemtrec 1-800-424-9300
(703) 527-3887 outside US

2. HAZARDS IDENTIFICATION

WARNING!

Emergency Overview

Contents under pressure.

May be harmful if swallowed, inhaled, or absorbed through skin

May cause sensitization by skin contact

May cause allergic respiratory reaction.

Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

Vapors may be irritating to eyes, nose, throat, and lungs.

May cause drowsiness and dizziness.

Appearance Pale Amber

Physical State Liquid Aerosol

Odor Faint hydrocarbon

Potential Health Effects

Principle Routes of Exposure Inhalation, Skin contact, Eye contact.

Acute Toxicity

Eyes

Irritating to eyes. Risk of serious damage to eyes.

Skin

Harmful in contact with skin. Will bond to skin. May cause sensitization by skin contact.

Inhalation

Harmful by inhalation. Irritating to respiratory system. May cause allergic respiratory reaction.

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

Inhalation of vapors in high concentration may cause shortness of breath (lung edema). May

cause allergy or asthma symptoms or breathing difficulties if inhaled.

Ingestion	May be harmful if swallowed. May cause additional affects as listed under "Inhalation". Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Product may cure in the gastrointestinal tract and form an obstruction. May cause adverse cardiac effects, blood disturbances, and metabolic acidosis.
Chronic Effects	Repeated or prolonged exposure may cause central nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Repeated or prolonged contact causes sensitization, asthma and eczemas.
Aggravated Medical Conditions	Allergies. Skin disorders. Respiratory disorders. Central nervous system. Preexisting eye disorders. Kidney disorders. Liver disorders.
Interactions with Other Chemicals	Irritants. Sensitizers. Epoxies. Use of alcoholic beverages may enhance toxic effects.
Environmental Hazard	See Section 12 for additional Ecological information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Polymethylene polyphenylene isocyanate	9016-87-9	30-60
Methylene bisphenyl isocyanate (MDI)	101-68-8	30-60
Methylenediphenyl diisocyanate	26447-40-5	5-10

4. FIRST AID MEASURES

General Advice	Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.
Eye Contact	In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Remove and wash contaminated clothing before re-use. Wash off immediately with plenty of water. If skin irritation persists, call a physician.
Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
Ingestion	Call a physician or Poison Control Center immediately. Do not induce vomiting. Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person.
Notes to Physician	May cause sensitization of susceptible persons. Treat symptomatically. Keep victim warm and quiet.
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Containers may explode when heated.
Flash Point	None
Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam. Water spray, fog or regular foam. Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal.
Unsuitable Extinguishing Media	Do not scatter spilled material with high pressure water streams.

Explosion Data

Sensitivity to mechanical impact	None
Sensitivity to static discharge	None

Specific Hazards Arising from the Chemical
Ruptured cylinders may rocket.

Protective Equipment and Precautions for Firefighters
Wear self-contained breathing apparatus and protective suit.

NFPA	Health Hazard 2	Flammability 1	Stability 1	Physical and Chemical Hazards -
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HMIS	Health Hazard 2*	Flammability 1	Stability 1	Personal Precautions -
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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Do not touch or walk through spilled material. Stop leak if you can do it without risk.
Methods for Containment	If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate. Dike to collect large liquid spills.
Methods for Cleaning Up	Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Do not direct water at spill or source of leak.
Other Information	Ventilate the area.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Do not breathe vapors or spray mist. Do not eat, drink or smoke when using this product. Use only in area provided with appropriate exhaust ventilation. Ensure adequate ventilation. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can.
Storage	Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep at temperatures below 48.8 °C / 120 °F.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methylene bisphenyl isocyanate (MDI)	TWA: 0.005 ppm	Ceiling: 0.02 ppm Ceiling: 0.2 mg/m ³	75 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures	Showers Eyewash stations Ventilation systems
Personal Protective Equipment	
Eye/Face Protection	Tightly fitting safety goggles.
Skin and Body protection	Lightweight protective clothing. Impervious gloves.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.
Hygiene Measures	When using, do not eat, drink or smoke. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Pale Amber	Odor	Faint hydrocarbon
Odor Threshold	No information available	Physical State	Liquid Aerosol
pH	No information available		
Flash Point	None	Autoignition Temperature	Not applicable
Decomposition temperature	No data available	Boiling Point/Range	-26°C / -14.8°F
Melting Point/Range	No data available		
Flammability Limits in Air	No data available	Explosion Limits	No data available
Specific Gravity	1.2	Water Solubility	Not Compatible
Solubility	Compatible.	Evaporation Rate	No data available
Vapor Pressure	No data available	Vapor Density	No data available
VOC Content	Not applicable	EPA VOC (g/l)	0
Partition Coefficient (n-octanol/water)	No data available		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	Keep away from open flames, hot surfaces and sources of ignition. Temperatures above 48.8 °C / 120 °F.
Incompatible Products	Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Hydrogen cyanide.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information . No acute toxicity information is available for this product.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Polymethylene polyphenylene isocyanate	49 g/kg (Rat)	9400 mg/kg (Rabbit)	490 mg/m ³ (Rat) 4 h
Methylene bisphenyl isocyanate (MDI)	9200 mg/kg (Rat)		
Methylenediphenyl diisocyanate		6200 mg/kg (Rabbit)	0.369 mg/L (Rat) 4 h

Subchronic Toxicity (28 days)

Chronic Toxicity

Chronic Toxicity Repeated or prolonged exposure may cause central nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Repeated or prolonged contact causes sensitization, asthma and eczemas.

Carcinogenicity There are no known carcinogenic chemicals in this product

Mutagenicity

Reproductive Toxicity This product does not contain any known or suspected reproductive hazards

Target Organ Effects Central nervous system (CNS), Central Vascular System (CVS), Eyes, Kidney, Liver, Respiratory system, spleen.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

12. ECOLOGICAL INFORMATION

Ecotoxicity
Ecotoxicity effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Methylenediphenyl diisocyanate	EC50 = 3230 mg/L 96 h			EC50 > 1000 mg/L 24 h

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method This material, as supplied, is not a hazardous waste according to state and federal regulations (40 CFR 261).

Contaminated Packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name Consumer commodity
Hazard Class ORM-D
Description Consumer commodity,ORM-D,

TDG
Proper Shipping Name Aerosols
Hazard Class 2.2
UN-No UN1950
Description AEROSOLS,2.2,UN1950

MEX
Proper Shipping Name Aerosols
Hazard Class 2.2
UN-No UN1950
Description UN1950 Aerosols,2.2,

ICAO
UN-No UN1950
Proper Shipping Name Aerosols
Hazard Class 2.2
Description Aerosols,UN1950

IATA
UN-No UN1950
Proper Shipping Name Aerosols, non-flammable
Hazard Class 2.2
ERG Code 2L
Description UN1950,Aerosols, non-flammable,2.2

IMDG/IMO
Proper Shipping Name Aerosols

14. TRANSPORT INFORMATION

Hazard Class	2
UN-No	UN1950
EmS No.	F-D, S-U
Description	UN1950, Aerosols,2
RID	
Proper Shipping Name	Aerosols
Hazard Class	2
UN-No	UN1950
Classification Code	5A
Description	UN1950 Aerosols,2,RID
ADR/RID-Labels	2
ADR	
Proper Shipping Name	Aerosols
Hazard Class	2
UN-No	UN1950
Classification Code	5A
ADR/RID-Labels	2
ADN	
Proper Shipping Name	Aerosols
Hazard Class	2
Classification Code	5A
Special Provisions	63, 190, 191, 277, 913
Description	UN1950 Aerosols,2,
Hazard Labels	2
Limited Quantity	See SP277

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
CHINA	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Polymethylene polyphenylene isocyanate	9016-87-9	30-60	1.0
Methylene bisphenyl isocyanate (MDI)	101-68-8	30-60	1.0
Methylenediphenyl diisocyanate	26447-40-5	5-10	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Methylene bisphenyl isocyanate (MDI)	5000 lb	

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methylene bisphenyl isocyanate (MDI)	X	X	X	X	X
1,1,1,2-Tetrafluoroethane		X			

International Regulations

Mexico - Grade

The exposure limits values for 101-68-8 are listed under two synonyms:
Diphenylmethane diisocyanate - 0.02 ppm TWA; 0.2 mg/m³ TWA
Methylene bisphenyl isocyanate - 0.005 ppm TWA; 0.051 mg/m³ TWA

Chemical Name	Carcinogen Status	Exposure Limits
Methylene bisphenyl isocyanate (MDI)		Mexico: TWA= 0.2 mg/m ³ Mexico: TWA= 0.02 ppm Mexico: TWA= 0.005 ppm Mexico: TWA= 0.051 mg/m ³

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

A Compressed gases
D2A Very toxic materials



Chemical Name	NPRI

Methylene bisphenyl isocyanate (MDI)	X
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Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Issuing Date	27-Feb-2007
Revision Date	NOT AUTHORIZED
Revision Note	No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS