




# 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>4</td></tr><tr><td>Reactivity</td><td>1</td></tr></table>	Health Hazard	2*	Fire Hazard	4	Reactivity	1		
Health Hazard	2*								
Fire Hazard	4								
Reactivity	1								

Issuing Date 15-Feb-2007

Revision Date

Revision Number 0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Touch 'n Foam Minimal Expanding Sealant  
White Lightning Stop Gap Minimal Expanding Insulating Foam

**Recommended Use** Insulation

**Supplier Address**  
Convenience Products, division of  
Clayton Corp.  
866 Horan Drive  
Fenton, MO 63026-2416 USA  
TEL: (636) 349-5855

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

## 2. HAZARDS IDENTIFICATION

### WARNING!

#### Emergency Overview

Contents under pressure.

Flammable gas.

Harmful by inhalation, in contact with skin and if swallowed.

May cause allergic respiratory reaction.

May cause sensitization by skin contact

Irritating to eyes, respiratory system and skin.

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

May cause drowsiness and dizziness.

May cause adverse cardiovascular effects.

**Appearance** Pale Amber

**Physical State** Liquid Aerosol

**Odor** Faint hydrocarbon

**Potential Health Effects**

<b>Principle Routes of Exposure</b>	Inhalation, Skin contact, Eye contact.
<b>Acute Toxicity</b>	
<b>Eyes</b>	Irritating to eyes. Risk of serious damage to eyes.
<b>Skin</b>	Harmful in contact with skin. Will bond to skin. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Chronic Effects</b>	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.
<b>Aggravated Medical Conditions</b>	Allergies. Skin disorders. Respiratory disorders. Central nervous system. Preexisting eye disorders. Kidney disorders. Liver disorders.
<b>Interactions with Other Chemicals</b>	Irritants. Sensitizers. Epoxies. Use of alcoholic beverages may enhance toxic effects.
<b>Environmental Hazard</b>	See Section 12 for additional Ecological information

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %
Polymethylene polyphenylene isocyanate	9016-87-9	10-30
Methylene bisphenyl isocyanate (MDI)	101-68-8	10-30
Flame Retardant	Proprietary	10-30
Polyol blend	Proprietary	10-30
Isobutane	75-28-5	1-5
Methylenediphenyl diisocyanate	26447-40-5	5-10
Propane	74-98-6	1-5
Dimethyl ether	115-10-6	5-10

**4. FIRST AID MEASURES**

<b>General Advice</b>	Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.
<b>Eye Contact</b>	Call a physician immediately. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.
<b>Skin Contact</b>	Wash skin with soap and water. If symptoms persist, call a physician. Remove and wash contaminated clothing before re-use.
<b>Inhalation</b>	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.

<b>Ingestion</b>	Call a physician or Poison Control Center immediately. May produce an allergic reaction. Do not induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.
<b>Notes to Physician</b>	Keep victim warm and quiet.
<b>Protection of First-aiders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Containers may explode when heated.
<b>Flash Point</b>	-104°C / -155°F
<b>Suitable Extinguishing Media</b>	Use extinguishing agent suitable for type of surrounding fire. Dry chemical or CO2. Water spray, fog or regular foam. Move containers from fire area if you can do it without risk. Damaged cylinders should be handled only by specialists.
<b>Explosion Data</b>	
<b>Sensitivity to mechanical impact</b>	None
<b>Sensitivity to static discharge</b>	Yes

**Specific Hazards Arising from the Chemical**  
Some may burn but none ignite readily. Ruptured cylinders may rocket.

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

<b>NFPA</b>	<b>Health Hazard 2</b>	<b>Flammability 4</b>	<b>Stability 1</b>	<b>Physical and Chemical Hazards -</b>
<b>HMIS</b>	<b>Health Hazard 2*</b>	<b>Flammability 4</b>	<b>Stability 1</b>	<b>Personal Precautions -</b>

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Take precautionary measures against static discharges. Use personal protective equipment. Keep people away from and upwind of spill/leak.
<b>Methods for Containment</b>	If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate. Dike to collect large liquid spills.
<b>Methods for Cleaning Up</b>	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.
<b>Other Information</b>	Ventilate the area.

## 7. HANDLING AND STORAGE

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<b>Handling</b>	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. 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.
<b>Storage</b>	Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children. 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 <sup>3</sup>	75 mg/m <sup>3</sup>
Isobutane	TWA: 1000 ppm	N/A	N/A
Propane	TWA: 1000 ppm	TWA: 1000 ppm	2100 ppm

*NIOSH IDLH: Immediately Dangerous to Life or Health*

**Engineering Measures**                      Showers  
     Eyewash stations  
     Ventilation systems

**Personal Protective Equipment**  
**Eye/Face Protection**                      Safety glasses with side-shields.  
**Skin and Body protection**                Impervious gloves. Lightweight protective clothing.  
**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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Pale Amber	<b>Odor</b>	Faint hydrocarbon
<b>Odor Threshold</b>	No information available	<b>Physical State</b>	Liquid Aerosol
<b>pH</b>	No information available		

<b>Flash Point</b>	-104°C / -155°F	<b>Autoignition Temperature</b>	Not applicable
<b>Decomposition temperature</b>	No data available	<b>Boiling Point/Range</b>	-42°C / -44°F
<b>Melting Point/Range</b>	No data available		
<b>Flammability Limits in Air</b>	No data available	<b>Explosion Limits</b>	No data available
<b>Specific Gravity</b>	1.05	<b>Water Solubility</b>	Not Compatible
<b>Solubility</b>	Compatible.	<b>Evaporation Rate</b>	No data available
<b>Vapor Pressure</b>	No data available	<b>Vapor Density</b>	No data available
<b>VOC Content</b>	Not applicable	<b>EPA VOC (g/l)</b>	106
<b>Partition Coefficient (n-octanol/water)</b>	No data available		

## 10. STABILITY AND REACTIVITY

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

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information**                      Product does not present an acute toxicity hazard based on known or supplied information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Polymethylene polyphenylene isocyanate	49 g/kg ( Rat )	9400 mg/kg ( Rabbit )	490 mg/m <sup>3</sup> ( Rat ) 4 h
Methylene bisphenyl isocyanate (MDI)	9200 mg/kg ( Rat )		
Flame Retardant	500 mg/kg ( Rat )	1230 mg/kg ( Rabbit ) 5000 mg/kg ( Rat )	5 mg/L ( Rat ) 4 h
Polyol blend	64 mL/kg ( Rat )	20 mL/kg ( Rabbit )	
Isobutane			658 mg/L ( Rat ) 4 h
Methylenediphenyl diisocyanate		6200 mg/kg ( Rabbit )	0.369 mg/L ( Rat ) 4 h
Propane		658 mg/kg ( Rat )	
Dimethyl ether			308.5 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**

Chemical Name	EU - Annex I Mutagens	Japan Mutagens
Methylene bisphenyl isocyanate (MDI)		X

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

**Target Organ Effects** Central nervous system (CNS), Eyes, Respiratory system, Immune system, Skin, Cardiovascular system.

**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)
Flame Retardant	EC50 = 4 mg/L 96 h EC50 = 45 mg/L 72 h		EC50 = 295 mg/L 30 min	EC50 = 63 mg/L 48 h
Methylenediphenyl diisocyanate	EC50 = 3230 mg/L 96 h			EC50 > 1000 mg/L 24 h

Chemical Name	Log Pow
Flame Retardant	2.59
Isobutane	2.88
Propane	2.3
Dimethyl ether	-0.18

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Should not be released into the environment. Dispose of in accordance with local regulations. Allow foam to cure before disposal.

**Contaminated Packaging** Dispose of in accordance with local regulations

**US EPA Waste Number** D001

**14. TRANSPORT INFORMATION**

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**DOT**

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

**TDG**

**Proper Shipping Name** Aerosols  
**Hazard Class** 2.1  
**UN-No** UN1950  
**Description** AEROSOLS,2.1,UN1950

**MEX**

**Proper Shipping Name** Aerosols  
**Hazard Class** 2.1  
**UN-No** UN1950  
**Description** UN1950 Aerosols,2.1

**ICAO**

**UN-No** UN1950  
**Proper Shipping Name** Aerosols  
**Hazard Class** 2.1  
**Description** Aerosols,UN1950

**IATA**

**UN-No** UN1950  
**Proper Shipping Name** Aerosols, flammable  
**Hazard Class** 2.1  
**ERG Code** 10L  
**Description** UN1950,Aerosols, flammable,2.1

**IMDG/IMO**

**Proper Shipping Name** Aerosols  
**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

**14. TRANSPORT INFORMATION**

**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 does not contain any 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	10-30	1.0
Methylene bisphenyl isocyanate (MDI)	101-68-8	10-30	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).

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
Dimethyl ether	X	X	X		X
Propane	X	X	X		X
Isobutane	X	X	X		
Methylene bisphenyl isocyanate (MDI)	X	X	X	X	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/m<sup>3</sup> TWA  
 Methylene bisphenyl isocyanate - 0.005 ppm TWA; 0.051 mg/m<sup>3</sup> TWA

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

**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
- B5 Flammable aerosol
- D2A Very toxic materials



Chemical Name	NPRI
Methylene bisphenyl isocyanate (MDI)	X

**Legend**

NPRI - National Pollutant Release Inventory

**16. OTHER INFORMATION**

**Issuing Date** 15-Feb-2007  
**Revision Date**  
**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**