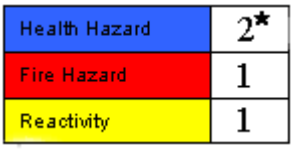
Material Safety Data Sheet

NFPA	HMIS	PPE	Transport Symbol
			

Issuing Date April 2, 2008 **Revision Date** May 14, 2008 **Revision Number 2**

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name
Component A for
Zero Draft Two Component Foam Kit (Regular)

Recommended Use
Insulation, Sealant

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.
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 **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 %
1,1,1,2- Tetrafluoroethane (Non-Flammable Compressed Gas, HFC-134a, Fluorocarbon)	811-97-2	7-14
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, CO_2, 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** -
HMIS	**Health Hazard** 2*	**Flammability** 1	**Stability** 1	**Personal Precautions** -

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 containers tightly closed in a cool, well-ventilated place. Ideal Storage Temperature is 16-32 °C / 60 – 90 °F. Storage above 32°C / 90 °F will reduce its shelf-life. Never keep at temperatures above 48.8 °C / 120 °F. Protect the container from physical abuse. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,1,1,2- Tetrafluoroethane* HFC-134a	None-established	None-established	
Methylene bisphenyl isocyanate (MDI)	TWA: 0.005 ppm	Ceiling: 0.02 ppm Ceiling: 0.2 mg/m^3	75 mg/m^3

* Workplace Environmental Exposure Level (AIHA) 8 hours TWA 1000ppm.

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 (Frothable)
pH	No information available		
Flash Point	None	**Autoignition Temperature**	Not applicable
Decomposition temperature	No data available	**Boiling Point/Range**	-26°C / -15°F for HFC-134a
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	No data available	**Evaporation Rate**	No data available
Vapor Pressure	No data available	**Vapor Density**	No data available
VOC Content	Not applicable	**EPA VOC (g/l)**	no
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 (CO2), Nitrogen oxides (NOx), 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
1,1,1,2- Tetrafluoroethane HFC-134a	None-established	None-established	None-established
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

Chemical Name	Log Pow
1,1,1,2- Tetrafluoroethane HFC-134a	1.06

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 Compressed gas, n.o.s. (1,1,1,2- Tetrafluoroethane, Nitrogen)
Hazard Class 2.2
Description NONFLAMMABLE GAS (Fluorocarbon, Nitrogen)

TDG

Proper Shipping Name Compressed gas, n.o.s. (1,1,1,2- Tetrafluoroethane, Nitrogen)
Hazard Class 2.2
UN-No UN1956
Description NONFLAMMABLE GAS (Fluorocarbon, Nitrogen)

MEX

Proper Shipping Name Compressed gas, n.o.s. (1,1,1,2- Tetrafluoroethane, Nitrogen)
Hazard Class 2.2

14. TRANSPORT INFORMATION

UN-No	UN1956
Description	NONFLAMMABLE GAS (Fluorocarbon, Nitrogen)

ICAO

UN-No	UN1956
Proper Shipping Name	Compressed gas, n.o.s. (1,1,1,2- Tetrafluoroethane, Nitrogen)
Hazard Class	2.2
Description	NONFLAMMABLE GAS (Fluorocarbon, Nitrogen)

IATA

UN-No	UN1956
Proper Shipping Name	Compressed gas, n.o.s. (1,1,1,2- Tetrafluoroethane, Nitrogen)
Hazard Class	2.2
ERG Code	2L
Description	NONFLAMMABLE GAS (Fluorocarbon, Nitrogen)

IMDG/IMO

Proper Shipping Name	Compressed gas, n.o.s. (1,1,1,2- Tetrafluoroethane, Nitrogen)
Hazard Class	2
UN-No	UN1956
EmS No.	F-D, S-U
Description	NONFLAMMABLE GAS (Fluorocarbon, Nitrogen)

RID

Proper Shipping Name	Compressed gas, n.o.s. (1,1,1,2- Tetrafluoroethane, Nitrogen)
Hazard Class	2
UN-No	UN1956
Classification Code	5A
Description	NONFLAMMABLE GAS (Fluorocarbon, Nitrogen)
ADR/RID-Labels	2

ADR

Proper Shipping Name	Compressed gas, n.o.s. (1,1,1,2- Tetrafluoroethane, Nitrogen)
Hazard Class	2
UN-No	UN1956
Classification Code	5A
ADR/RID-Labels	2

Note: Transportation information provided is for reference only. Client is urged to consult 49 CFR 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

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 HFC-134a		X	X		

International Regulations

Mexico - Grade

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

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
Polymethylene polyphenylene isocyanate	X
1,1,1,2- Tetrafluoroethane, HFC-134a	X

Legend
NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Issuing Date April 2, 2008

Revision Date May 14, 2008

Revision Note

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