# Material Safety Data Sheet

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
<th>PPE</th>
<th>Transport Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td><img src="image" alt="Symbol" /></td>
<td><img src="image" alt="Symbol" /></td>
<td><img src="image" alt="Symbol" /></td>
</tr>
</tbody>
</table>

## Issuing Date

March 11, 2008

## Revision Date

May 14, 2008

## Revision Number

2

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name**

Component B for
Touch 'n Seal Foam Kit Class I FR Foam
Touch 'n Seal Mine Foam
Touch 'n Seal Rib & Roof Foam Sealant
Touch 'n Seal Foam Kit Low Density

**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

#### Emergency Overview

May cause drowsiness and dizziness.

**Appearance** Pale Amber

**Physical State** Liquid

**Odor** Faint hydrocarbon

**Potential Health Effects**

Inhalation, Skin contact, Eye contact.

**Principle Routes of Exposure**

- **Acute Toxicity**
  - **Eyes**
    - May cause slight irritation. Avoid contact with eyes.
  - **Skin**
    - May cause skin irritation and/or dermatitis. Contact with product may cause frostbite. Avoid contact with skin and clothing.
  - **Inhalation**
    - May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. Irritating to mucous membranes. Avoid breathing vapors or mists.
  - **Ingestion**
    - Not an expected route of exposure. No known effect based on information supplied.

**Chronic Effects**

No known effect based on information supplied

**Aggravated Medical Conditions**

Central nervous system.

**Environmental Hazard**

See Section 12 for additional Ecological information
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2- Tetrafluoroethane (Non-Flammable Compressed Gas, HFC-134a, Fluorocarbon)</td>
<td>811-97-2</td>
<td>10-30</td>
</tr>
<tr>
<td>Proprietary Polyol Blend</td>
<td>Proprietary mixture</td>
<td>60-90</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact
Wash off immediately with plenty of water for at least 15 minutes. In case of contact with liquefied gas, thaw frosted parts with lukewarm water. If symptoms persist, call a physician.

Inhalation
Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion
Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.

Notes to Physician
Treat symptomatically

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. 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: 1
- Flammability: 1
- Stability: 0
- Physical and Chemical Hazards: -

HMIS
- Health Hazard: 1
- Flammability: 1
- Stability: 0
- Personal Precautions: -

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Ensure adequate ventilation

Methods for Containment
Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Following product recovery, flush area with water.

7. HANDLING AND STORAGE

Handling
Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with eyes. Ensure adequate ventilation. Do not breathe vapors or spray mist.

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2- Tetrafluoroethane</td>
<td>None-established</td>
<td>None-established</td>
<td>None-established</td>
</tr>
<tr>
<td>HFC-134a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Engineering Measures
Shower
Eyewash stations
Ventilation systems

Personal Protective Equipment

Eye/Face Protection
Tightly fitting safety goggles.

Skin and Body Protection
Wear protective gloves/clothing.

Respiratory Protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Pale Amber

Odor
Faint hydrocarbon

Odor Threshold
No information available

Physical State
Liquid (Frothable)

pH
No information available

Autoignition Temperature
Not applicable

Flash Point
None

Boiling Point/Range
-26°C / -15°F for HFC-134a

Decomposition temperature
No data available

Melting Point/Range
No data available

Flammability Limits in Air
No data available

Explosion Limits
No data available
Component B for
Touch 'n Seal Foam Kit  Class I FR Foam
Touch 'n Seal Mine Foam
Touch 'n Seal Rib & Roof Foam Sealant
Touch 'n Seal Foam Kit Low Density

Specific Gravity  1.2
Solubility No data available
Vapor Pressure No data available
VOC Content Not applicable
Partition Coefficient (n-octanol/water) No data available
Water Solubility Not Compatible
Evaporation Rate No data available
Vapor Density No data available
EPA VOC (g/l) 0

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions
Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition.
Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors, Carbon monoxide (CO), Carbon dioxide (CO2).
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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2- Tetrafluoroethane</td>
<td>None-established</td>
<td>None-established</td>
<td>None-established</td>
</tr>
<tr>
<td>HFC-134a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Subchronic Toxicity (28 days)
Chronic Toxicity
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).
Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

12. ECOLOGICAL INFORMATION

Ecotoxicity
Ecotoxicity effects.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Microtox</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
</table>

Page 4 / 7
### 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
- **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

---

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2- Tetrafluoroethane</td>
<td>1.061</td>
</tr>
<tr>
<td>HFC-134a</td>
<td></td>
</tr>
</tbody>
</table>
14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>UN-No</th>
<th>UN1956</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification Code</td>
<td>5A</td>
</tr>
<tr>
<td>ADR/RID-Labels</td>
<td>2</td>
</tr>
</tbody>
</table>

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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Complies</td>
</tr>
<tr>
<td>ENCS</td>
<td>Complies</td>
</tr>
<tr>
<td>CHINA</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2- Tetrafluoroethane, HFC-134a</td>
<td>811-97-2</td>
<td>10-30</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

- Acute Health Hazard: Yes
- Chronic Health Hazard: No
- 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).

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2- Tetrafluoroethane*, HFC-134a</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Carcinogen Status</th>
<th>Exposure Limits</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>NPRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2- Tetrafluoroethane, HFC-134a</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend
NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Issuing Date  March 11, 2008
Revision Date  May 14, 2008
Revision Note  Container Sizes in product name removed

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