



MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: CertaSpray® Kit B-Side

PRODUCT DESCRIPTION: Liquid

PRODUCT USE: CertaSpray^{PK} spray foam is a two component spray foam with a non-ozone depleting blowing agent. When the CertaSpray^{PK} A is mixed with the CertaSpray^{PK} B under pressure in a 1:1 volumetric ratio, it expands into a high density closed-cell foam.

CHEMICAL NAME: Mixture
CAS NUMBER: None Assigned
EINECS: None Assigned
MOLECULAR FORMULA: No Data Available

Company Identification

CERTAINTEED CORPORATION
P.O. Box 860
Valley Forge, PA 19482
United States

WEB ADDRESS: www.certainteed.com

Phone Numbers

Technical Information: (610) 341-7000 - 9 AM – 5 PM (Eastern Time – USA)

*Emergency: (800) 424-9300 - EMERGENCY TELEPHONE: CHEMTREC
Emergency: (703) 527-3887 - OUTSIDE OF THE U.S. CHEMTREC*

MSDS Number: CT 10152-2
PREPARATION DATE: 1/15/2010
LAST REVISION DATE: 10/19/2011
Product Literature Number: 30-50-053

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

GHS

WARNING!

Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. Contains gas under pressure; may explode if heated.

Prevention

Avoid breathing dust, fume, gas, mist, vapors and/or spray. In case of inadequate ventilation wear respiratory protection. Wear protective gloves, clothing, and eye protection.


Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage/Disposal Protect from sunlight and store in well ventilated place. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



NFPA/HMIS RATINGS:

| | <u>Health</u> | <u>Fire</u> | <u>Reactivity</u> | <u>Degree of Hazard</u> |
|--------------|---------------|-------------|-------------------|------------------------------|
| NFPA RATING: | 2 | 1 | 1 | 0 - Minimal (Insignificant) |
| | | | | 1 - Slight |
| | | | | 2 - Moderate |
| | | | | 3 - Serious (High) |
| | | | | 4 - Severe (Extreme) |
| | | | | * - Chronic Health Effect(s) |
| HMIS RATING: | 2 | 1 | 0 | |

PHYSICAL FORM: Liquid

COLOR: Yellowish

ODOR: Slight

HAZARDS: Compressed Gas, Irritant

OSHA: Compressed Gas, Irritant

WHMIS: Class A - Compressed Gas, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B



GHS: Gasses Under Pressure - Compressed Gas, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A

ROUTE OF ENTRY: Inhalation, Skin, Eye

TARGET ORGANS: Respiratory System, Eye/Ocular, Skin/Dermal

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No Data Available

POTENTIAL HEALTH EFFECTS:

INHALATION:

ACUTE (IMMEDIATE): May cause irritation.

CHRONIC (DELAYED): No data available.

SKIN:

ACUTE (IMMEDIATE): May cause irritation.

CHRONIC (DELAYED): No data available.

EYE:

ACUTE (IMMEDIATE): May cause irritation.

CHRONIC (DELAYED): No data available.

INGESTION:

ACUTE (IMMEDIATE): May cause irritation.

CHRONIC (DELAYED): No data available.

MUTAGENIC EFFECTS: No mutagenic effects expected.

CARCINOGENIC EFFECTS: No carcinogenic effects expected.

REPRODUCTIVE EFFECTS: No reproductive effects expected.

OTHER ACUTE EFFECTS: No data available.

OTHER CHRONIC EFFECTS: No data available.

POTENTIAL ENVIRONMENTAL EFFECTS: No information available for product. Based on ecological data from components of this material there are no known significant effects or critical hazards to the environment.

See Section 12 for Ecological Information

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Composition/Information on Ingredients

| Chemical Name | CAS | %(weight) | UN;EINECS | LD50/LC50 | EU Classification & R Phrases | Other |
|------------------------------|----------|----------------|-------------------|----------------------------|-------------------------------|-------|
| Polyether polyol | NDA | 60% TO 100% | NDA | NDA | NDA | NDA |
| Ethane, 1,1,1,2-tetrafluoro- | 811-97-2 | 13% TO 30% | UN3159, 212-377-0 | ihl-rat LC50:1500 gm/m3/4H | NDA | NDA |

According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is considered Hazardous. In Canada, the product mentioned above is considered Hazardous under the Workplace Hazardous Materials Information System (WHMIS). Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard) this product is considered Hazardous.

See Section 11 for Toxicological Information

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician if symptoms occur.

SKIN: Rinse skin immediately with water for 15-20 minutes. Take off contaminated clothing. Call a physician if symptoms occur.

EYE: Flush eyes with water for at least 15 minutes while holding eyelids open. If easy to do, remove contact lenses, if worn. Call a physician if symptoms occur.

INGESTION: If swallowed, rinse mouth with water (only if the person is conscious). Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Do not give anything by mouth to an unconscious person.

ANTIDOTES: No data available

NOTES TO PHYSICIAN: Adrenalin and similar sympathomimetic drugs should be avoided following exposure as cardiac arrhythmia may result with possible subsequent cardiac arrest. Symptomatic treatment and supportive therapy as indicated. Following severe exposure the patient should be kept under medical review for at least 48 hours as delayed pulmonary edema may develop.

See Section 2 for Potential Health Effects

SECTION 5 - FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

LARGE FIRES: Water spray, fog or regular foam.

SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.

UNSUITABLE EXTINGUISHING MEDIA: None known.

FIREFIGHTING PROCEDURES:

LARGE FIRES: Move containers from fire area if you can do it without risk.

LARGE FIRES: Dike fire control water for later disposal; do not scatter the material.

LARGE FIRES: Do not get water inside containers.

FIRES INVOLVING TANKS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

FIRES INVOLVING TANKS: Cool containers with flooding quantities of water until well after fire is out.

FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

FIRES INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.

FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Do not expose to high temperatures or open flames. Containers may explode when heated.

HAZARDOUS COMBUSTION PRODUCTS: No data available.

PROTECTION OF FIREFIGHTERS:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

FLASH POINT:

EXPLOSION LIMITS

UPPER: No Data Available

LOWER: No Data Available

AUTOIGNITION TEMPERATURE: No Data Available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Ventilate enclosed areas. Wear appropriate respirator when ventilation is inadequate. Wear appropriate personal protective equipment.

EMERGENCY PROCEDURES: Eliminate all ignition sources. Stop leak if you can do it without risk. As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions.

ENVIRONMENTAL PRECAUTIONS: Prevent entry into waterways, sewers, basements or confined areas.

CONTAINMENT/CLEAN-UP MEASURES:

Stop leak if you can do it without risk.

Move containers from spill area.

Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container.

Do not flush to sewer or allow to enter waterways.

PROHIBITED MATERIALS: No data available.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Wear appropriate personal protective equipment. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking and smoking. Avoid contact with eyes, skin and clothing. Do not breathe (dust, vapor or spray mist). Wear appropriate respirator when ventilation is inadequate.

STORAGE: Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Keep out of direct sunlight. Store in accordance with local regulations.

SPECIAL PACKAGING MATERIALS: Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink.

INCOMPATIBLE MATERIALS OR IGNITION SOURCES: No data available.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

PPE:



RESPIRATORY PROTECTION: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

EYE/FACE PROTECTION: Wear splash goggles.

HANDS PROTECTION: Chemical-resistant, impervious gloves should be worn at all times when handling this product.

SKIN/BODY PROTECTION: Base the choice of protection on the job activity and potential for skin contact.

GENERAL INDUSTRIAL HYGIENE CONSIDERATIONS: In accordance with good industrial hygiene practices, precautions should be taken to avoid contact. If contact occurs, wash hands, face and other potentially exposed areas immediately after handling material (especially before eating, drinking, or smoking).

ENGINEERING MEASURES/CONTROLS: Use local exhaust ventilation to maintain airborne concentrations below the TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it.

EXPOSURE LIMITS/GUIDELINES: No data available.

ENVIRONMENTAL EXPOSURE CONTROLS: No data available.

RECOMMENDED EXPOSURE LIMITS: No Data Available

COMPONENT EXPOSURE LIMITS:

None

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Liquid

APPEARANCE/DESCRIPTION: Yellowish liquid with slight odor.

| | | | |
|--|----------------------|------------------------|-----|
| COLOR: Yellowish | | ODOR: Slight | |
| TASTE: No data available | | ODOR THRESHOLD: NDA | |
| BOILING POINT: | > 200 F(> 93.3333 C) | VAPOR PRESSURE: | NDA |
| MELTING POINT/FREEZING POINT: | NDA | VAPOR DENSITY: | NDA |
| SPECIFIC GRAVITY: | NDA | EVAPORATION RATE: | NDA |
| DENSITY: | NDA | VOC (WT.): | NDA |
| BULK DENSITY: | NDA | VOC (VOL.): | NDA |
| WATER SOLUBILITY: | NDA | VOLATILES (WT.): | NDA |
| SOLVENT SOLUBILITY: | NDA | VOLATILES (VOL.): | NDA |
| VISCOSITY: | NDA | FLASH POINT: | NDA |
| HALF-LIFE: | NDA | FLASH POINT TEST TYPE: | NDA |
| OCTANOL/WATER PARTITION COEFFICIENT: | NDA | UEL: | NDA |
| COEFFICIENT OF WATER/OIL DISTRIBUTION: | NDA | LEL: | NDA |
| BIOACCUMULATION FACTOR: | NDA | AUTOIGNITION: | NDA |
| PH: | NDA | | |

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

CONDITIONS TO AVOID: No data available.

INCOMPATIBLE MATERIALS:

No data available

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION 11 - TOXICOLOGICAL INFORMATION

This product has not been tested as a separate entity. Therefore, the hazards must be evaluated on the basis of the individual ingredients, and those hazards must be assumed to be additive in the absence of complete information. The hazards described in this document have been evaluated on a threshold of 1.0% for all hazardous ingredients and 0.1% for all carcinogens, mutagens, reproductive hazards and respiratory sensitizers.

PRODUCT INFORMATION: Irritation may be observed in the upper respiratory system, eyes, and skin.

| Component Name | Concentration | CAS | Data |
|------------------------------|---------------|----------|---|
| Ethane, 1,1,1,2-tetrafluoro- | 13% TO 30% | 811-97-2 | Toxicity: ihl-rat LC50:1500 gm/m3/4H |

SECTION 12 - ECOLOGICAL INFORMATION

PRODUCT INFORMATION: No information available for the product. Based on ecological data from components of this material there are no known significant effects or critical hazards to the environment.

ECOLOGICAL FATE: No information available for the product.

PERSISTENCE / DEGRADABILITY: No information available for the product.

MOBILITY IN SOIL: No information available for the product.

COMPONENT INFORMATION: No data available.

SECTION 13 - DISPOSAL CONSIDERATIONS

PRODUCT: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. All wastes containing the material should be properly labeled. Dispose of any waste residues according to prescribed federal, state, and local guidelines, e.g., appropriately permitted chemical waste incinerator.

PACKAGING: Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.

SECTION 14 - TRANSPORTATION INFORMATION

U.S. DOT 49 CFR 172.101:

SHIPPING NAME: Compressed gas or gases, n.o.s.

ID NUMBER: UN1956

HAZARD CLASS: Class 2 - Gases - Division 2.2

LABELING CLASS: Class 2 - Gases - Division 2.2

PASSENGER AIRCRAFT/RAIL: No Data Available

CARGO AIRCRAFT/RAIL: No Data Available

TDG - CANADA - TRANSPORT OF DANGEROUS GOODS:
 SHIPPING NAME: Compressed gas or gases, n.o.s.
 ID NUMBER: UN1956
 HAZARD CLASS: Class 2 - Gases - Class 2.2
 LABELING CLASS: Class 2 - Gases - Class 2.2

SECTION 15 - REGULATORY INFORMATION

SARA HAZARD CLASSIFICATIONS:
 Acute Health: Yes Chronic Health: No Fire: No Pressure: No Reactive: No

US FEDERAL:

GENERAL PRODUCT INFORMATION:

Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are either exempt from listing (i.e. polymers, hydrates) or are listed on the confidential inventory as declared by the supplier.

CERCLA:

This material does NOT contain chemicals required to be identified under CERCLA (40 CFR 302.4)

STATE REGULATIONS:

COMPONENT ANALYSIS - STATE:

The following components appear on one or more of the following state hazardous substances lists:

| Component | CAS # | CA | MA | MN | NJ | PA | RI |
|------------------------------|----------|----|----|-----|----|----|----|
| Ethane, 1,1,1,2-tetrafluoro- | 811-97-2 | No | No | Yes | No | No | No |

CALIFORNIA SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT (PROPOSITION 65):

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

None of the components in this product are known to the State of California to cause cancer or developmental and reproductive toxicity.

CANADIAN WHMIS INFORMATION:

GENERAL PRODUCT INFORMATION:

Class A - Compressed Gas, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B

COMPONENT ANALYSIS - WHMIS IDL:

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List: None

ADDITIONAL REGULATORY INFORMATION:

GENERAL PRODUCT INFORMATION:

Irritation may be observed in the upper respiratory system, eyes, and skin.

COMPONENT ANALYSIS – INVENTORY:

| Component | CAS # | TSCA | DSL | EINECS |
|------------------------------|----------|------|-----|--------|
| Ethane, 1,1,1,2-tetrafluoro- | 811-97-2 | Yes | Yes | Yes |

SECTION 16 - OTHER INFORMATION

PREPARATION DATE: 1/15/2010

LAST REVISION DATE: 10/19/2011

DISCLAIMER: Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

For reference to the acronyms/definitions used in this MSDS please visit www.certainteed.com.

This is the end of MSDS # CT10152-2