



# MATERIAL SAFETY DATA SHEET

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MATERIAL NAME:** CertaSpray® Kit A-Side

PRODUCT DESCRIPTION: Liquid

PRODUCT USE: CertaSpray<sup>PK</sup> spray foam is a two component spray foam with a non-ozone depleting blowing agent. When the CertaSpray<sup>PK</sup> A is mixed with the CertaSpray<sup>PK</sup> 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](http://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 10151-2  
PREPARATION DATE: 1/13/2010  
LAST REVISION DATE: 10/19/2011  
Product Literature Number: 30-50-052

## SECTION 2 - HAZARDS IDENTIFICATION

### Emergency Overview

GHS
DANGER!
Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Contains gas under pressure; may explode if heated.
Avoid breathing dust, fume, gas, mist, vapors and/or spray.
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of inadequate ventilation wear respiratory protection.

IF IN EYES: Rinse cautiously with water for several minutes. 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 or rash occurs: Get medical advice/attention.

Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves and eye/face protection. Wash thoroughly after handling.

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)
HMIS RATING:	2*	1	1	* - Chronic Health Effect(s)

PHYSICAL FORM: Liquid

COLOR: Amber

ODOR: Slightly musty

HAZARDS: Compressed Gas, Irritant, Respiratory Sensitizer, Skin Sensitizer

OSHA: Compressed Gas, Irritant, Respiratory Sensitizer, Skin Sensitizer

WHMIS: - Class A - Compressed Gas, Poisonous and Infectious Materials - Division 2 - Subdivision A, 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, Respiratory Sensitizer - Category 1, Skin Sensitizer – Category 1

ROUTE OF ENTRY: Inhalation, Skin, Eye

TARGET ORGANS: Respiratory System, Eye, Skin

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No Data Available

POTENTIAL HEALTH EFFECTS:

INHALATION:

ACUTE (IMMEDIATE): May cause irritation.  
 CHRONIC (DELAYED): Repeated and prolonged exposure may cause sensitization. A hyper-active response to even minimal concentrations of diisocyanates may develop in sensitized persons. The onset of the respiratory symptoms may be delayed for several hours after exposure.

SKIN:

ACUTE (IMMEDIATE): May cause irritation.  
 CHRONIC (DELAYED): Prolonged and repeated exposure may cause skin sensitization.

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
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	30% TO 60%	UN9004, 202-966-0	orl-rat LD50:9200 mg/kg ihl-rat LC50:178 mg/m3	Xn;R20 Xi;R36/37/38 R42/43	NDA
Polymethylenepolyphenyl isocyanate	9016-87-9	30% TO 60%	NDA	orl-rat LD50:49 gm/kg ihl-rat LC50:490 mg/m3/4H skn-rbt LD50:>9400 mg/kg	NDA	NDA
Ethane, 1,1,1,2-tetrafluoro-	811-97-2	7% TO 13%	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 or poison control center.

**SKIN:** Rinse skin immediately with plenty of soap and water for 15-20 minutes. A study has demonstrated that a polyglycol-based skin cleanser or corn oil may be more effective than soap or water. Take off contaminated clothing. Wash contaminated clothing before reuse. Call a physician or poison control center.

**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 or poison control center.

**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, CO<sub>2</sub>, 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:** Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>), hydrocarbons, and HCN.

**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. PVC boots, gloves, safety helmet and protective clothing should be worn.

**FLASH POINT:** = 390 F(= 198.89 C) CC (Closed Cup)

**EXPLOSION LIMITS**

UPPER: No Data Available

LOWER: No Data Available

AUTOIGNITION TEMPERATURE: > 600 C(> 1112 F)

## 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. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. 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. Do not store in container made of copper, copper alloys or galvanized surfaces.

**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:** Wear lab coat or other protective overgarment. 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:**

**US STATE CALIFORNIA**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **PELs:** (0.005 ppm PEL; 0.051 mg/m<sup>3</sup> PEL)

**United States - OSHA**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **Ceiling Limits:** (0.02 ppm Ceiling; 0.2 mg/m<sup>3</sup> Ceiling) | **Ceilings:** (0.02 ppm Ceiling; 0.2 mg/m<sup>3</sup> Ceiling)

**United States - ACGIH**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **TWAs:** (0.005 ppm TWA) | **TLV Basis - Critical Effects:** (respiratory sensitization)

**United States - NIOSH**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **Ceiling Limits:** (0.020 ppm Ceiling (10 min); 0.2 mg/m<sup>3</sup> Ceiling (10 min)) | **TWAs:** (0.005 ppm TWA; 0.05 mg/m<sup>3</sup> TWA)

**Canada - British Columbia**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **TWAs:** (0.005 ppm TWA) | **Ceilings:** (0.01 ppm Ceiling) | **Skin Notations:** (Skin notation) | **Sensitizers:** (Sensitizer) | **Designated Substances:** (Sensitizer)

**Canada - Manitoba**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **TWAs:** (0.005 ppm TWA)

**Canada - New Brunswick**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **TWAs:** (0.005 ppm TWA; 0.051 mg/m<sup>3</sup> TWA)

**Canada - Northwest Territories**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **Ceilings:** (0.02 ppm Ceiling; 0.2 mg/m<sup>3</sup> Ceiling)

**Canada - Nova Scotia**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **TWAs:** (0.005 ppm TWA)

**Canada - Nunavut**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **Ceilings:** (0.02 ppm Ceiling; 0.2 mg/m<sup>3</sup> Ceiling)

**Canada - Ontario**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **TWAEVs:** (0.005 ppm TWAEV (designated substance regulation); 0.2 µmol/m<sup>3</sup> TWAEV (designated substance regulation)) | **CEVs:** (0.02 ppm CEV (designated substances regulation); 0.8 µmol/m<sup>3</sup> CEV (designated substances regulation)) | **Designated Substances:** (0.005 ppm TWAEV; 0.2 µmol/m<sup>3</sup> TWAEV; 0.02 ppm CEV; 0.8 µmol/m<sup>3</sup> CEV)

**Canada - Quebec**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **TWAEVs:** (0.005 ppm TWAEV; 0.051 mg/m3 TWAEV)

**Canada - Yukon**

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): **Ceilings:** (0.02 ppm Ceiling; 0.2 mg/m3 Ceiling)

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL FORM: Liquid

APPEARANCE/DESCRIPTION: Amber liquid with slightly musty odor.

COLOR: Amber		ODOR: Slightly musty	
TASTE: No data available		ODOR THRESHOLD: NDA	
BOILING POINT:	> 300 C(> 572 F)	VAPOR PRESSURE:	NDA
MELTING POINT/FREEZING POINT:	NDA	VAPOR DENSITY:	8.5 Air=1
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:	198.89 C(390.002 F)
HALF-LIFE:	NDA	FLASH POINT TEST TYPE:	CC (Closed Cup)
OCTANOL/WATER PARTITION COEFFICIENT:	NDA	UEL:	NDA
COEFFICIENT OF WATER/OIL DISTRIBUTION:	NDA	LEL:	NDA
BIOACCUMULATION FACTOR:	NDA	AUTOIGNITION:	> 600 C(> 1112 F)
PH:	NDA		

**SECTION 10 - STABILITY AND REACTIVITY**

STABILITY: Stable at room temperature. Reaction with water (moisture) produces CO<sub>2</sub>-gas. Exothermic reaction may occur with materials containing active hydrogen groups.

HAZARDOUS POLYMERIZATION: Hazardous polymerization may occur at elevated temperatures in the presence of alkalis, tertiary amines and metal compounds.

CONDITIONS TO AVOID: Avoid high temperature.

INCOMPATIBLE MATERIALS:

Water, alcohols, amines, bases, and acids

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>), hydrocarbons, and

HCN.

**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. Repeated and prolonged exposure may cause skin and respiratory sensitization. A hyper-active response to even minimal concentrations of diisocyanates may develop in sensitized persons. The onset of the respiratory symptoms may be delayed for several hours after exposure.

Component Name	Concentration	CAS	Data
Isocyanic acid, methylenedi-p-phenylene ester	30% TO 60%	101-68-8	<b>Irritation:</b> skn-rbt 500 mg/24H <b>Toxicity:</b> orl-rat LD50:9200 mg/kg; ihl-rat LC50:178 mg/m3
Polymethylenepolyphenyl isocyanate	30% TO 60%	9016-87-9	<b>Irritation:</b> eye-rbt 100 mg MLD <b>Toxicity:</b> orl-rat LD50:49 gm/kg; ihl-rat LC50:490 mg/m3/4H; skn-rbt LD50:>9400 mg/kg
Ethane, 1,1,1,2-tetrafluoro-	7% TO 13%	811-97-2	<b>Toxicity:</b> 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:

Isocyanic acid, methylenedi-p-phenylene ester (101-68-8)						
Test Type	Dosage	Units	Species	Species Description	Duration	Results
Aquatic Toxicity	> 1000	mg/L	Crustacea	Daphnia magna	48 Hour(s)	EC50
Aquatic Toxicity	> 1000	mg/L	Fish	No Data Available	96 Hour(s)	LC50

Polymethylenepolyphenyl isocyanate (9016-87-9)						
Test Type	Dosage	Units	Species	Species Description	Duration	Results
Aquatic Toxicity	> 1000	mg/L	Crustacea	Daphnia magna	48 Hour(s)	EC50
Aquatic Toxicity	> 1000	mg/L	Fish	No Data Available	96 Hour(s)	LC50

**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: Yes 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 contain chemicals required to be identified under CERCLA (40 CFR 302.4):

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8) 60 to 30% 5000 lb final RQ; 2270 kg final RQ

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
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	Yes	Yes	Yes	Yes	Yes	Yes
Polymethylenepolyphenyl isocyanate	9016-87-9	No	No	No	Yes	No	No
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, Poisonous and Infectious Materials - Division 2 - Subdivision A, 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:

- Isocyanic acid, methylenedi-p-phenylene ester (101-68-8) 60 to 30% 0.1 %

**ADDITIONAL REGULATORY INFORMATION:**

**GENERAL PRODUCT INFORMATION:**

Irritation may be observed in the upper respiratory system, eyes, and skin. Repeated and prolonged exposure may cause sensitization. A hyper-active response to even minimal concentrations of diisocyanates may develop in sensitized persons. The onset of the respiratory symptoms may be delayed for several hours after exposure.

**COMPONENT ANALYSIS – INVENTORY:**

Component	CAS #	TSCA	DSL	EINECS
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	Yes	Yes	Yes
Polymethylenepolyphenyl isocyanate	9016-87-9	Yes	Yes	No
Ethane, 1,1,1,2-tetrafluoro-	811-97-2	Yes	Yes	Yes

**SECTION 16 - OTHER INFORMATION**

PREPARATION DATE: 1/13/2010

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](http://www.certainteed.com).

*This is the end of MSDS # CT10151-2*