# *Material Safety Data Sheet*

**Carlisle Construction Materials: Versico Polyiso Products**

Date of Preparation: March 2014 Revision: 001

## Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** SecurShield CD, SecurShield HD Composite, SecureShield HD, SecurShield HD Plus, SecurShield Polyiso, SecurShield Tapered Polyiso, MP-HNB Polyiso, MP-H Polyiso, MP-HF Polyiso, MP-HF Tapered Polyiso,
**Chemical Family:** Polyisocyanurate
**CAS Number:** N/A
**Other Designations: Polyiso**
**Manufacturer:** Carlisle Construction Materials Incorporated, 1285 Ritner Highway, Carlisle, PA 17013, Phone: 800-992-7663
**Emergency Phone Number**: CHEMTREC (USA) 800-424-9300
**NFPA Hazard Rating:** Health 1, Flammability 1, Reactivity 0
**HMIS Hazard Rating:** Health 1, Flammability 1, Reactivity 0

## Section 2 - Composition / Information on Ingredients

| Ingredient Name | CAS # | % wt | OSHA PEL (ppm) | TWA (ppm) |
|---|---|---|---|---|
| Polyisocyanurate | None | > 35 | None Established | None Established |
| Proprietary additives | Proprietary | < 5 | None Established | Non Established |
| n-Pentane | 109-60-0 | < 8 | 1000 | 600 |
| Iso-Pentane | 78-78-4 | < 2 | 1000 | 600 |
| Fibrous glass | 65997-17-3 | < 10 | TLV 1 f/cc(Respirable) | TLV 5 $mg/m^3$ (Inhalable) |
| Calcium Carbonate | 471-34-1 | < 40 | PEL 15 $mg/m^3$ (Total) | PEL 5 $mg/m^3$ (Respirable) |

## Section 3 - Hazards Identification

### Potential Health Effects

**Primary Entry Routes:** Inhalation, skin contact
**Target Organs:**
**Acute Effects**
**Inhalation:** irritation.
**Eye:** irritation
**Skin:** irritation
**Ingestion:**
**Carcinogenicity:** IARC, NTP, and OSHA do not list this product as a carcinogen.
**Medical Conditions Aggravated by Long-Term Exposure:**
**Chronic Effects:** Possible allergic reaction of respiratory system (sensitization)

## Section 4 - First Aid Measures

**Inhalation:** Remove to fresh air.
**Eye Contact:** Flush with water for 15 minutes or until irritation ceases.
**Skin Contact:** Wash with soap and water.
**Ingestion:**
***After first aid, get appropriate in-plant, paramedic, or community medical support.***
**Note to Physicians:**
**Special Precautions/Procedures:** Persons who develop symptoms of allergy, irritation, respiratory problems, or puffiness around the eyes should be examined by a physician as soon as possible.

## Section 5 - Fire-Fighting Measures

**Flash Point:** N/A
**Flash Point Method:** N/A
**Burning Rate:**
**Autoignition Temperature:** Not available.
**LEL:** N/A
**UEL:** N/A
**Flammability Classification:** Division 4

**Extinguishing Media:** In case of fire, use dry chemicals, carbon dioxide, foam, or water fog,
**Unusual Fire or Explosion Hazards:** None known.
**Hazardous Combustion Products:** Carbon monoxide, carbon dioxide.
**Fire-Fighting Instructions:** Fire-fighters should wear self-contained breathing apparatus.
**Fire-Fighting Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

## Section 6 - Accidental Release Measures

**Spill /Leak Procedures:** Normal housekeeping.
**Small Spills:** N/A
**Large Spills: N/A**
**Containment:** N/A
**Cleanup:** N/A
**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## Section 7 - Handling and Storage

**Handling Precautions:** No special equipment required.
**Storage Requirements:** Protect from moisture.
**Regulatory Requirements:** N/A

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** Sufficient ventilation (when cutting) to keep exposure to nuisance dust below 5 $mg/m^3$.
**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.
**Administrative Controls:** None
**Respiratory Protection:** OSHA approved respirator or dust mask when cutting.
**Protective Clothing/Equipment:** Protective gloves. Safety glasses or goggles, especially when cutting. Protective clothing and footwear.
**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.
**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid
**Appearance and Odor:** Tan core foam with cellulose glass fiber facings-no odor.
**Odor Threshold:** N/A
**Vapor Pressure:** N/A
**Vapor Density (Air=1):** N/A
**Formula Weight:**
**Specific Gravity ($H_2O$=1, at 4 °C):** Unknown
**pH:** N/A

**Water Solubility:** Not soluble.
**Other Solubilities:** N/A
**Boiling Point:** N/A
**Freezing/Melting Point:** N/A
**Viscosity:** N/A
**Refractive Index:** N/A
**Surface Tension:** N/A
**% Volatile:** N/A
**Evaporation Rate:** N/A

## Section 10 - Stability and Reactivity

**Stability:** Stable.
**Polymerization:** Will not occur.
**Chemical Incompatibilities:** Acetone, MEK, THF, chlorine, chloroform, hydrogen peroxide, ethylene dichloride, dimethyl sulfoxide, and dimethyl formamide.
**Conditions to Avoid:** Open flame. Will burn if exposed to fire of sufficient heat and intensity.
**Hazardous Decomposition Products:** Toxic Smoke or vapors, such as carbon monoxide or carbon dioxide, may be released in a fire.

## Section 11- Toxicological Information

**Acute Toxicity**

**A: General Product Information**

Dust from this product is a mechanical irritant, which means that it may cause temporary irritation or scratchiness of the throat, and/or itching of the eyes and skin.

n-pentane may be released at very low concentrations (well below their lower flammability limits) from these products when they are cut or crushed. These pentanes are nontoxic at levels below their lower flammability limits.

**B: Component Analysis – LD50/LC50**

**n-pentane (109-60-0)**

Oral LD50 Mouse: 12800 mg/kg

**Carcinogenicity**

**A: General Product Information**

The Occupational Safety and Health Administration (OSHA), National Toxicology Program (NTP), International Agency for Research on Cancer (IARC), and American Conference of Governmental Industrial Hygienists (ACGIH) have not classified this product as a carcinogen.

**B: Component Carcinogenicity**

**Continuous filament glass fibers (65997-17-3)**

ACGIH: A4 – Not classifiable as a Human Carcinogen

IARC: Group 3 – Not classifiable (IARC Monograph 81 [2002] (listed under Man-made mineral fibres), Monograph 43 [1988]

**Chronic Toxicity**

Polyisocyanurate Foam: There is no evidence that dust from this material causes disease in man. There are no known animal studies of the chronic health effects of breathing dust from polyisocyanurate foam. However, a subchronic inhalation study showed no adverse respiratory effects in rats as a result of breathing 9 mg/m3 of dust from a similar foam (polyurethane foam) for 3 months (Thyssen et al., 1978). In, 1987, IARC designated polyurethane as Group 3, not classifiable as to carcinogenicity to humans (Monograph 19).

Continuous Filament Glass Fiber: No chronic helath effects are known to be associated with exposure to continuous filament fiber glass. Long-term epidemiologic studies do not show any increases in respiratory cancer or other disease among employees who manufacture this product. In 1987, the International Agency for Research on Cancer (IARC) classified continuous filament fiber glass as a Group 3 substance, "not classifiable as to its carcinogenicity to humans." In 2001, IARC re-affirmed this designation. Because of the large diameter of continuous filament fibers, these fibers are not considered respirable.

## Section 12 - Ecological Information

**Ecotoxicity**

**A: General Product Information**

No additional information available

**B: Component Analysis – Ecotoxicity – Aquatic Toxicity**

**n-pentane (109-60-0)**

**Material Name: Polyisocyanurate Foam Insulation**

48 Hr EC50 Daphnia magna: 10.5 mg/L

**Isopentane (78-78-4)**

48 Hr EC50 Daphnia magna: 2.3 mg/L

## Section 13 - Disposal Considerations

**US EPA Waste Number & Descriptions**

**A: General Product Information**

This product, as supplied, is not regulated as a hazardous waste by the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. Comply with state and local regulations for disposal. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the EPA.

**B: Component Waste Numbers**

No EPA Waste Numbers are applicable for this product's components

**Disposal Instructions**

Dipose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14 - Transport Information

### DOT Transportation Data (49 CFR 172.101):

**Shipping Name:** SecurShield, SecurShield HD Coverboard, Composite
**Shipping Symbols:** N/A
**Hazard Class:** N/A
**ID No.:** N/A
**Packing Group:** N/A
**Label:** N/A
**Special Provisions (172.102):** N/A

**Packaging Authorizations**
**a) Exceptions:** N/A
**b) Non-bulk PackagingN/A**
**c) Bulk Packaging:** N/A

**Quantity Limitations**
**a) Passenger, Aircraft, or Railcar:**
**b) Cargo Aircraft Only:** N/A

**Vessel Storage Requirements**
**a) Vessel Stowage:** N/A
**b) Other:** N/A

## Section 15 - Regulatory Information

**EPA Regulations:**

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)
RCRA Hazardous Waste Classification (40 CFR 261): Not classified
CERCLA Hazardous Substance (40 CFR 302.4) listed/unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112
CERCLA Reportable Quantity (RQ), N/A
SARA 311/312 Codes:
SARA Toxic Chemical (40 CFR 372.65): Not listed
SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

**OSHA Regulations:**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed
OSHA Specifically Regulated Substance not listed

**State Regulations:**

N/A

## Section 16 - Other Information

**Prepared By:** Research & Development
**Revision Notes:**

**Additional Hazard Rating Systems:**

**Disclaimer:** The information contained in this document is based upon data that was supplied to Carlisle Construction Materials Incorporated by other companies and organizations. No warranty of merchantability or fitness for a particular purpose is expressed or implied regarding the accuracy or completeness of the data and/or information in this material safety data sheet.

.....