Material Safety Data Sheet

Material Name: GenFlex Nailboard **GFRS 903**

* * * Section 1 - Chemical Product and Company Identification * * *

Chemical Description: GenFlex Nailboard

Manufacturer Information

GenFlex Roofing Systems
1722 Indian Wood Circle
Suite A
Maumee, OH 43537

Phone: 800-443-4272

Emergency # 1-800-424-9300 (CHEMTREC)

General Comments

NOTE: CHEMTREC telephone number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

* * * Section 2 - Hazards Identification * * *

Emergency Overview

Product is in the form of a yellow-to-tan foam board on wood. Under normal conditions of use, this product is not expected to create any unusual health or emergency hazards. Cutting, sawing grinding or fabrication of this product may create dusts. Breathing dust from this product may cause a scratchy throat, congestion, and slight coughing. Getting dust on the skin or in the eyes may cause irritation.

Potential Health Effects: Eyes

Exposure to dusts can cause mild irritation. Irritation symptoms can include burning, tearing, redness, and swelling.

Potential Health Effects: Skin

Exposure to dusts may cause mild skin irritation. Symptoms may include dryness and redness of the skin.

Potential Health Effects: Ingestion

Ingestion of dusts is not expected to be a likely route of exposure. However, ingestion of large quantities of dust may cause obstruction of the gastrointestinal tract, nausea, and vomiting.

Potential Health Effects: Inhalation

Inhalation of dusts may irritate the respiratory tract. Symptoms may include sneezing, coughing, and difficulty breathing. Severe exposure may cause pneumoconiosis. Chronic inhalation of dusts may cause lung disease (e.g., emphysema, bronchitis, and fibrosis).

HMIS Ratings: Health: 1 **Fire:** 1 **Reactivity:** 0

(Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard)

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Approx. Percent
9063-78-9	Polyisocyanurate foam	25-45
65997-17-3	Continuous filament glass fibers	2-15

Component Related Regulatory Information

This product contains components that may be regulated, have exposure limits or other information identified as the following: Glass filaments, Nuisance particulates.

Component Information/Information on Non-Hazardous Components

This product has been determined to be an “article”, meeting the criteria established in 29CFR1910.1200(b)(6)(v) and does not pose a physical hazard and/or health risk under normal conditions of use.

This product has a wood fiberboard backing that when cut will release wood dust.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

In case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.

First Aid: Skin

For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting unless instructed to do so by medical personnel.

First Aid: Inhalation

Remove subject to fresh air. If irritation persists or if breathing is difficult get immediate medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

* * * Section 5 - Fire Fighting Measures * * *

Flash Point: Not available
Method Used: Not applicable
Upper Flammable Limit (UFL): Not available
Lower Flammable Limit (LFL): Not available
Auto Ignition: Not available
Flammability Classification: Non-combustible
Rate of Burning: Not available

General Fire Hazards

Material may be prone to smolder longer than wood after flames have been extinguished. Wood dust is a strong to severe explosion hazard if a dust "cloud" contacts an ignition source. Wood dusts may ignite at temperatures in excess of 204ºC (400ºF). Avoid excess heat, open flame, and sparks. Avoid contact with oxidizing agents.

Hazardous Combustion Products

The decomposition products from this material are those that would be expected from any organic (carbon-containing) material, and are mainly derived from pyrolysis, or burning, of the polymer. These decomposition products may include carbon dioxide, carbon monoxide, carbon particles, and traces of hydrogen cyanide.

Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self-contained breathing apparatus.

NFPA Ratings: Health: 1 **Fire:** 1 **Reactivity:** 0

(Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe)

* * * Section 6 - Accidental Release Measures * * *

Containment Procedures

Isolate the material and wet down lightly with water. Prevent runoff of any cleanup water into surface waters or storm sewers with absorbent pads or booms. When cleaning spill, wear appropriate personal protective equipment. Avoid generating dusty conditions. The use of a dust suppressant agent or water is recommended to control the creation of airborne dusts and thereby reduce the risk of a fire and/or explosion.

Clean-Up Procedures

Shovel the material into waste container. If it cannot be reused, place in covered container for disposal. Dispose of all material in accordance with local, state and federal regulations. (see Section 13)

Evacuation Procedures

Evacuation should not be necessary.

Special Procedures

No information available.

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Avoid breathing dusts from this material. Use of high speed rotary cutting tools may create excessive dusts. Avoid dust inhalation through adequate ventilation and the use of respiratory protection.

Storage Procedures

Keep this material in a cool, well-ventilated place.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Exposure Guidelines

A: General Product Information

Follow all applicable exposure limits.

B: Component Exposure Limits

Continuous filament glass fibers (65997-17-3)

ACGIH: 1 f/cc TWA (for respirable fibers longer than 5 um with a diameter less than 3 um); 5 mg/m3 TWA (inhalable particulate); (Listed under "Synthetic vitreous fibers") (related to Continuous filament glass fibers)
10 mg/m3 TWA (inhalable particulate); 3 mg/m3 TWA (respirable particulate) (These values are for particulate matter containing no asbestos and <1% crystalline silica) (related to Particulates not otherwise classified (PNOC))

OSHA: total dust: 15 mg/m3 TWA; respirable fraction: 5 mg/m3 TWA (related to Particulates not otherwise regulated)

NIOSH: see Appendix D (related to Particulates not otherwise regulated)

C: COMPOUNDS WHICH MAY BE RELEASED DURING PROCESSING

Wood dusts-soft woods (Not Available)

ACGIH: 5 mg/m3 TWA
(10 mg/m3) STEL

Wood dust, all soft and hard woods (Not Available)

OSHA: 5 mg/m3 TWA
10 mg/m3 STEL

NIOSH: 1 mg/m3 TWA; NIOSH Potential Occupational Carcinogen - see Appendix A

Engineering Controls

Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear dust goggles.

Personal Protective Equipment: Skin

Not normally required. Work gloves can protect skin from contact with dusts, mechanical irritation or chapping.

Personal Protective Equipment: Respiratory

Respiratory protection not normally required. If airborne contaminant levels may exceed recommended exposure limits, NIOSH approved respiratory protection appropriate for employee exposure levels is recommended. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.1 requirements must be followed whenever workplace conditions warrant a respirator's use.

Personal Protective Equipment: General

Use good industrial hygiene practices in handling this material.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	yellow-to-tan foam board on wood	**Odor:**	Odorless
Physical State:	Solid	**pH:**	Not available
Vapor Pressure:	Not available	**Vapor Density:**	Not available
Boiling Point:	Not available	**Melting Point:**	Not available
Solubility (H2O):	Not available	**Specific Gravity:**	0.03
		Flash Point:	Not Available

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Avoid generation of dusts.

Incompatibility

Acetone, methyl ethyl ketone, tetrahydrofuran, chlorine, chloroform, hydrogen peroxide, ethylene dichloride, dimethyl sulfoxide, and dimethyl formamide.

Hazardous Decomposition

The decomposition products from this material are those that would be expected from any organic (carbon-containing) material, and are mainly derived from pyrolysis, or burning, of the polymer. These decomposition products may include carbon dioxide, carbon monoxide, carbon particles, and traces of hydrogen cyanide.

Hazardous Polymerization

Hazardous polymerization will not occur.

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

A: General Product Information

This product is a mixture for which no toxicological data exists. When available, toxicological data for the product's hazardous ingredients are provided below for relevant routes of exposure.

Exposure to high concentrations of nuisance dusts can cause lung overload. Nuisance dusts do not have the ability to induce lung timors if lung overload is prevented. If overload is present, inflammation may cause tumors as an indirect mechanism.

There is no evidence that polyisocyanurate foam dust causes disease in man.
Although one animal study has reported lung cancer following exposure to high levels of dust, subsequent animal studies have not show that result. Emphysema has been produced in animals following exposure to high levels of dust. Polyisocyanurate foam may release wood dust when cut. Risk of a rare form of nasal cancer has been associated with wood dust exposure.

Wood products can be contaminated with a saprophytic fungi (alternaria species) that when inhaled can cause hypersensitivity pneumonitis, an allergic condition that can lead to chronic disease and irreversible pulmonary damage. This fungi has been detected in wood pulp, and is believed to have caused lung disease in lumber mill workers. Also, reduced pulmonary function has been reported by some observers in workers who have been exposed to excessive levels of wood dust for prolonged periods of time, however these results have not been found consistently across all studies.

No chronic health effects are known to be associated with exposure to continuous filament fiber glass. Results from epidemiological studies have not shown any increases in respiratory disease of cancer. IARC classified continuous filament fiber glass as a Group 3 substance, not classifiable as to its carcinogenicity. Continuous filament fiber glass is not considered respirable because of its large fiber diameter.

B: Component Analysis - LD50/LC50

None of this product's components present at greater than 0.1% have LD50/LC50 data. The components of this product as supplied present at trace levels are not expected to exhibit acute toxicity.

Carcinogenicity

A: General Product Information

No carcinogenicity data available for this product.

B: Component Carcinogenicity

Continuous filament glass fibers (65997-17-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen (related to Continuous filament glass fibers)
IARC: Monograph 43, 1988 (related to Glass filaments) (Group 3 (not classifiable))

Chronic Toxicity

No information available.

Epidemiology

No data available for this product.

Neurotoxicity

No information available.

Mutagenicity

No information available.

Teratogenicity

No information available.

Other Toxicological Information

None available.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

No data available for this product.

Environmental Fate

No data available for this product.

* * * Section 13 - Disposal Considerations * * *

US EPA Waste Number & Descriptions

A: General Product Information

Product, as shipped, is not a hazardous waste. No components are identified as hazardous wastes. Waste should be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

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

Disposal Instructions

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

* * * Section 14 - Transportation Information * * *

US DOT Information

Shipping Name: This product is not regulated by DOT.
Hazard Class: Not applicable
UN/NA #: Not applicable
Packing Group: Not applicable
Required Label(s): Not applicable

* * * Section 15 - Regulatory Information * * *

US Federal Regulations

A: General Product Information

None

B: Component Analysis

None of this products components are listed under, or present in a quantity requiring reporting under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

A: General Product Information

No information available.

B: Component Analysis - State

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

Component	CAS #	CA	FL	MA	MN	NJ	PA
Continuous filament glass fibers	65997-17-3	No	No	No	Yes	No	No

C: COMPOUNDS WHICH MAY BE RELEASED DURING PROCESSING

The following components which may be released during use appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	FL	MA	MN	NJ	PA
Wood dusts-soft woods	Not Available	No	No	No	Yes	No	Yes

Other Regulations

A: General Product Information

None

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Polyisocyanurate foam	9063-78-9	Yes	Yes	No
Continuous filament glass fibers	65997-17-3	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

* * * Section 16 - Other Information * * *

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act

This is the end of MSDS