

GenFlex Roofing Systems Material Safety Data Sheet

Material Name: EPDM Water Based Bonding Adhesive

February 5, 2008

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

Product Use: Adhesive

Manufacturer Information

GenFlex Roofing Systems, LLC
250 West 96th Street
Indianapolis, IN 46260

Phone: 317-575-7190 (Non-Emergency)

Emergency # 1-800-424-9300 (CHEMTREC)
International # 1-703-527-3887 (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

Heating of this product can include formation of vapors which may be irritating to eyes, skin, and respiratory system. Toxic fumes or gases may be released during fire. Fire fighters should wear a self-contained breathing apparatus with a full face piece.

Potential Health Effects: Eyes

This product may cause irritation to the eyes.

Potential Health Effects: Skin

This product is not expected to cause irritation.

Potential Health Effects: Ingestion

Ingestion of this product may cause nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation

High concentrations of vapors are unlikely unless material is heated. Excessive inhalation of mists or vapors and fumes from heated material may cause nasal and respiratory irritation.

HMIS Ratings: Health: 1 Fire: 0 Reactivity: 0 Pers. Prot.: safety glasses/gloves

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

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

CAS #	Component	Approx. Percent
N/A	Acrylic Polymer	40-50
1332-58-7	Hydrous Aluminum Silicate	5-10
7664-41-7	Ammonia	<1
108-05-4	Vinyl Acetate	<1

Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

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

First Aid: Eyes

In case of contact with dusts or particulate matter, immediately flush eyes with plenty of water for 15 minutes. If irritation persists, seek medical attention.

First Aid: Skin

For skin contact, promptly wash with soap and water. If irritation develops, 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

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If inhaled, remove immediately to fresh air. If symptoms develop or persist, seek immediate medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

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

Flash Point: Not determined

Upper Flammable Limit (UFL): Not determined

Auto Ignition: Not determined

Rate of Burning: Not determined

General Fire Hazards

No unusual fire or explosion hazards. Product will not burn but may spatter if the temperature exceeds the boiling point of water. The solid portion of the product is combustible and will decompose during combustion or under pyrolysis conditions giving off toxic fumes. Closed containers may rupture if exposed to extreme heat or fire.

Hazardous Combustion Products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media

Water (preferred), dry chemical, foam.

Fire Fighting Equipment/Instructions

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

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

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

Method Used: Not determined

Lower Flammable Limit (LFL): Not determined

Flammability Classification: Not determined

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

Containment Procedures

Contain the discharged material. Eliminate all sources of ignition. Do not allow the spilled product to enter public drainage system or open water courses.

Clean-Up Procedures

Absorb spilled material with nonflammable inert absorbent. For large spills, dike far ahead of liquid spill for later disposal. Scrape up the spilled material. Shovel the material into waste container.

Evacuation Procedures

Keep unnecessary personnel away.

Special Procedures

Wear appropriate protective equipment and clothing during clean-up.

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

Handling Procedures

Avoid breathing vapors or mists of this product. Use this product with adequate ventilation. Wash thoroughly after handling.

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

Hydrous Aluminum Silicate, (1332-58-7)

ACGIH: 2 mg/m³ TWA respirable fraction

OSHA: 15 mg/m³ TWA total particulate

5 mg/m³ TWA respirable fraction

NIOSH: 10 mg/m³ TWA total particulate

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5 mg/m³ TWA respirable fraction

Ammonia, (7664-41-7)

ACGIH: 25 ppm TWA
35 ppm STEL
OSHA: 50 ppm TWA; 215 mg/m³ TWA
NIOSH: 25 ppm TWA; 215 mg/m³ TWA
35 ppm STEL; 425 mg/m³ STEL

Vinyl Acetate, (108-05-4)

ACGIH: 10 ppm TWA
15 ppm STEL
OSHA: not regulated
NIOSH: 4 ppm (ceiling)

C: ADDITIONAL COMPOUNDS WHICH MAY BE RELEASED DURING PROCESSING

Styrene. (100-42-5)

ACGIH: 20 ppm TWA
40 ppm STEL
OSHA: 50 ppm TWA; 215 mg/m³ TWA
100 ppm STEL; 425 mg/m³ STEL
NIOSH: 50 ppm TWA; 215 mg/m³ TWA
100 ppm STEL; 425 mg/m³ STEL

1,3-Butadiene. (106-99-0)

ACGIH: 2 ppm TWA
OSHA: 1 ppm TWA (8 hr.); 5 ppm STEL (15 min.); 0.5 ppm Action Level (see 29 CFR 1910.1051)
NIOSH: NIOSH Potential Occupational Carcinogen - see Appendix A

Engineering Controls

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces. Special care must be taken to avoid inhalation exposure when using this product at high temperatures and to avoid the generation of mists or vapors.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses; chemical goggles for fumes which may arise from thermal processing.

Personal Protective Equipment: Skin

Wear impervious gloves for prolonged contact. The use of protective coveralls and long sleeved clothing is recommended for prolonged or repeated contact. Wash thoroughly after use.

Personal Protective Equipment: Respiratory

If ventilation is not sufficient to effectively remove vapors and fumes, appropriate NIOSH recommended respiratory protection must be provided.

Personal Protective Equipment: General

Use good industrial hygiene practices in handling this material.

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

Appearance:	Blue emulsion liquid	Odor:	Not available
Physical State:	Liquid	pH:	7.5-9.0
Vapor Pressure:	17 mm Hg @ 68°F (Water)	Vapor Density:	0.62 (Water)
Boiling Point:	212°F (Water)	Melting Point:	Not available
Solubility (H₂O):	Not available	Specific Gravity:	8.25 lbs./gal.
Freezing Point:	Not available	Evaporation Rate:	0.2 (Water)
Percent Volatile:	50 (Water)	Flash Point:	Not Determined

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

Chemical Stability

Stable.

Chemical Stability: Conditions to Avoid

Coagulation may occur following freezing-thawing, boiling, or the addition of chemicals.

Incompatibility

Avoid contact with water sensitive materials and strong oxidizers.

Hazardous Decomposition

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Hazardous Polymerization

Hazardous polymerization will not occur.

***** Section 11 - Toxicological Information *****

Acute Toxicity

A: General Product Information

No data available for product.

Significant adverse health effects would not be anticipated with normal use. However, heating of the product can emit mists and vapors which may cause eye, skin, and respiratory system irritation.

Intentional misuse by deliberately concentrating and inhaling vapor may be harmful or fatal.

B: Component Analysis - LD50/LC50

Ammonia, (7664-41-7)

Oral LD50 Rat: 2900 mg/kg

Oral LD50 Mouse: 1600 mg/kg

Inhalation LC50 Rat: 11,400 mg/m³

Inhalation LC50 Mouse: 1,550 ppm

Inhalation LC50 Rabbit: 2,500 ppm

Inhalation LC50 Guinea Pig: 6,200 ppm

Skin LD50 Rabbit: 2335 mg/kg

Vinyl Acetate, (108-05-4)

Unreported LDLO Man: 132 mg/kg

Inhalation LCLO Human: 5,000 ppm/5 minutes

Inhalation LC50 Rat: 2,000 ppm/4 hours

Inhalation LC50 Mouse: 4,230 ppm/1 hour

Inhalation LC50 Cat: 7 gm/m³/1 hour

Inhalation LC50 Rabbit: 7 gm/m³/1 hour

Carcinogenicity

A: General Product Information

No carcinogenicity data available for this product.

This product contains polymer(s) based on styrene (CAS# 100-42-5) and 1,3 butadiene (CAS# 106-99-0). The residual amount of each monomer in the product is less than 0.1% by weight. During processing and storage, trace amounts of residual monomers can be released. It is listed as a possible human carcinogen (Group 2B) by IARC.

1,3-butadiene is listed as a probable human carcinogen (Group 2A) by IARC. It is also listed as a substance that may reasonably be anticipated to be a carcinogen by NTP, as a suspect human carcinogen by ACGIH and as a potential human carcinogen by NIOSH.

B: Component Carcinogenicity

Vinyl Acetate, (108-05-4)

ACGIH: A3 – Confirmed animal carcinogen with unknown relevance to humans

IARC: 2B-Possible human carcinogen

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Epidemiology

No data available for this product.

Neurotoxicity

No data available for this product.

Mutagenicity

No data available for this product.

Teratogenicity

No data available for this product.

Other Toxicological Information

None available.

***** Section 12 - Ecological Information *****

Ecotoxicity

A: General Product Information

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

This material has no components listed.

Environmental Fate

No data available for this product.

***** Section 13 - Disposal Considerations *****

US EPA Waste Number & Descriptions

A: General Product Information

Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

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

This material has no components listed.

Disposal Instructions

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

***** Section 14 - Transportation Information *****

US DOT Information

Shipping Name: Not regulated

Hazard Class: None

UN/NA #: None

Packing Group: None

Required Label(s): None

Additional Info.: None

International Transportation Regulations

Not regulated as dangerous goods.

***** Section 15 - Regulatory Information *****

US Federal Regulations

A: General Product Information

No additional information.

B: Component Analysis

Ammonia, (7664-41-7)

SARA 313: form R reporting required for 1.0% de minimis concentration

CERCLA: RQ=100 pounds (45.4 kg)

Vinyl Acetate, (108-05-4)

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SARA 313: form R reporting required for 0.1% de minimis concentration

CERCLA: RQ=5,000 pounds (45.4 kg)

B: TSCA 12(b) Export Notification

This material has no components listed.

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

Component	CAS #	CA	FL	MA	MN	NJ	PA	DE
Hydrous Aluminum Silicate	1332-58-7	No	No	No	No	No	No	No
Ammonia	7664-41-7	No	No	Yes	No	Yes	Yes	Yes
Vinyl Acetate	108-05-4	No	No	Yes	Yes	Yes	Yes	Yes

C: ADDITIONAL 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	DE
Styrene	100-42-5	No	No	Yes	Yes	Yes	Yes	Yes
1,3-Butadiene	106-99-0	Yes	No	Yes	Yes	Yes	Yes	Yes

Other Regulations

A: General Product Information

No information available for the product.

B: Component Analysis – Inventory

The following components are identified on various country inventories

Component	CAS #	TSCA	DSL/NDSL	EINECS
Hydrous Aluminum Silicate	1332-58-7	Yes	Yes	Yes
Ammonia	7664-41-7	Yes	Yes	Yes
Vinyl Acetate	108-05-4	Yes	Yes	Yes

C: Component analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredients Disclosure List:

Component	CAS #	
Ammonia	7664-41-7	1%; English Item 86; French Item 225
Vinyl Acetate	108-05-4	1%; English Item 1683; French Item 35

***** Section 16 - Other Information *****

Date of Previous MSDS: April 4, 2007

Changes Since Previous MSDS: Section 1 – Product name change and company address change.

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

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***** Disclaimer *****

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