

Safety Data Sheet

GenFlex Roofing Systems

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name • EPDM Water Based Bonding Adhesive

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) • Construction: Adhesive

1.3 Details of the supplier of the safety data sheet

Manufacturer • Firestone Building Products Company
250 West 96th Street
Indianapolis, IN 46260
United States

Telephone (General) • genflexmsds@bfdp.com
800-428-4442

1.4 Emergency telephone number

Manufacturer • (800) 424-9300 - CHEMTREC

Manufacturer • (703) 527-3887 - CHEMTREC - International

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Eye Irritation 2 - H319
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335

DSD/DPD • Irritant (Xi)
R36/37

2.2 Label Elements

CLP

WARNING

Hazard statements • H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary statements

Prevention • P261 - Avoid breathing dust, fume, gas, mist, vapours and/or spray.
P271 - Use only outdoors or in a well-ventilated area.
P264 - Wash thoroughly after handling.

- Response** ● P280 - Wear eye/face protection , .
 ● P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313 - If eye irritation persists: Get medical advice/attention.
- Storage/Disposal** ● P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD



- Risk phrases** ● R36/37 - Irritating to eyes and respiratory system.
- Safety phrases** ● S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3 Other Hazards

- CLP** ● According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.
- DSD/DPD** ● According to European Directive 1999/45/EC this preparation is considered dangerous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012** ● Eye Irritation 2A - H319
 Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335

2.2 Label elements

OSHA HCS 2012

WARNING



- Hazard statements** ● Causes serious eye irritation - H319
 May cause respiratory irritation - H335

Precautionary statements

- Prevention** ● Avoid breathing dust, fume, gas, mist, vapours and/or spray. - P261
 Wash thoroughly after handling. - P264
 Use only outdoors or in a well-ventilated area. - P271
 Wear eye/face protection , . - P280
- Response** ● IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340
 Call a POISON CENTER or doctor/physician if you feel unwell. - P312
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
 If eye irritation persists: Get medical advice/attention. - P337+P313
- Storage/Disposal** ● Store in a well-ventilated place. Keep container tightly closed. - P403+P233
 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

2.3 Other hazards

- OSHA HCS 2012** ● Under United States Regulations (29 CFR 1910.1200 - Hazard Communication

Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS

- Other Toxic Effects - D2B

2.2 Label elements

WHMIS



- Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Butadiene Styrene Copolymer	NDA	40% TO 50%	NDA	EU DSD/DPD: Data Lacking EU CLP: Data Lacking OSHA HCS 2012: Data Lacking	NDA
1,2-Propanediol	CAS:57-55-6 EC Number:200-338-0	< 1%	Ingestion/Oral-Rat LD50 • 20 g/kg Skin-Rabbit LD50 • 20800 mg/kg	EU DSD/DPD: Not Classified - Criteria Not Met EU CLP: Not Classified - Criteria Not Met OSHA HCS 2012: Eye Irrit. 2B	NDA

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.

Skin

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Wash skin with soap and water. Take off contaminated clothing and

- wash before reuse. If irritation develops and persists, get medical attention.
- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- Do NOT induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. Get medical attention and advise the physician of the nature of the material. If ingested, monitor for acidosis and central nervous system changes. Those with kidney history of dysfunction may require special treatment.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

- Suitable Extinguishing Media**
- Material is non-flammable. Use media appropriate for surrounding materials (e.g., water spray, alcohol foam, or carbon dioxide).
- Unsuitable Extinguishing Media**
- None known.

5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- None known.
- Hazardous Combustion Products**
- Oxides of carbon.

5.3 Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Use only with adequate ventilation. Wear respiratory protection. Wear appropriate protective clothing.
- Emergency Procedures**
- As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stay upwind. Keep out of low areas. Keep unauthorized personnel away. Ventilate closed spaces before entering.

6.2 Environmental precautions

- No special precautions necessary.

6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Stop leak if you can do it without risk.
Absorb liquid on inert material. Transfer to secured container for proper disposal.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal

Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Do not breathe vapors, dust, or spray mist. Use only with adequate ventilation. Avoid contact with eyes. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Do not allow product to freeze. Keep container/package tightly closed in a cool, well-ventilated place.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines		
	Result	Canada Ontario
1,2-Propanediol (57-55-6)	TWAs	10 mg/m ³ TWA (for assessing the visibility in a work environment where 1,2-Propylene glycol aerosol is present, aerosol only); 50 ppm TWA (aerosol and vapor); 155 mg/m ³ TWA (aerosol and vapor)

8.2 Exposure controls

Engineering Measures/Controls

- This adhesive is designed to be used outdoors, in roofing applications. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear splash goggles.

Skin/Body

- Wear appropriate chemical resistant gloves.

General Industrial Hygiene Considerations

- Wash exposed skin prior to eating, drinking or smoking and at the end of each shift. Wash contaminated clothing prior to reuse.

Environmental Exposure Controls

- In case of spills, keep product clear of sewers, waterways or land areas. Dispose of waste product in accordance with national and local laws and regulations.

Key to abbreviations

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	White liquid with slight odor.
Color	White	Odor	Slight
Odor Threshold	Data lacking		
General Properties			

Boiling Point	212 F(100 C)	Melting Point	0 C(32 F)
Decomposition Temperature	Data lacking	pH	7.5 to 9
Specific Gravity/Relative Density	1 Water=1	Density	Data lacking
Water Solubility	Soluble	Solvent Solubility	Data lacking
Viscosity	Data lacking	Explosive Properties	Not explosive.
Oxidizing Properties:	Not an oxidizer.		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	> 1 Air=1
Evaporation Rate	Data lacking		
Flammability			
Flash Point	> 100 C(> 212 F)	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Not flammable.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Do not allow this product to freeze. Avoid contact with water sensitive materials and strong oxidizers.

10.5 Incompatible materials

- Incompatible Materials: Water sensitive materials

10.6 Hazardous decomposition products

- Burning will produce smoke, carbon monoxide, and carbon dioxide.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
1,2-Propanediol (< 1%)	57-55-6	Acute Toxicity: orl-rat LD50:20 gm/kg; skn-rbt LD50:20800 mg/kg; Irritation: eye-rbt 100 mg MLD; skn-hmn 500 mg/7D MLD; skn-hmn 104 mg/3D-I MOD
GHS Properties		Classification
Acute toxicity		EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard		EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

Carcinogenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-RE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-SE	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Toxicity for Reproduction	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2A

Route(s) of entry/exposure

- Inhalation, Skin, Eye, Ingestion/Oral

Medical Conditions Aggravated by Exposure

- Kidney disorders (via accidental ingestion). Pre-existing skin conditions.

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause respiratory irritation.

Chronic (Delayed)

- No data available.

Skin

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- Prolonged or repeated skin contact may cause irritation.

Eye

Acute (Immediate)

- Causes serious eye irritation.

Chronic (Delayed)

- No data available.

Ingestion

Acute (Immediate)

- May cause gastrointestinal irritation and central nervous system depression if accidentally ingested.

Chronic (Delayed)

- Lactic acidosis, stupor and seizures from chronic ingestion only.

Carcinogenic Effects

- The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP.

Key to abbreviations

LD = Lethal Dose

MLD = Mild

MOD = Moderate

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not regulated	NDA	NDA	NDA
TDG	NDA	Not regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not regulated	NDA	NDA	NDA
ADN	NDA	Not Regulated	NDA	NDA	NDA
ADR/RID	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not regulated	NDA	NDA	NDA

14.6 Special precautions for user

- None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

- Acute

State Right To Know				
Component	CAS	MA	NJ	PA
1,2-Propanediol	57-55-6	No	Yes	Yes
Water	7732-18-5	No	No	No

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
1,2-Propanediol	57-55-6	Yes	No	Yes	No	Yes
Water	7732-18-5	Yes	No	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• 1,2-Propanediol	57-55-6	Uncontrolled product according to WHMIS classification criteria
• Water	7732-18-5	Uncontrolled product according to WHMIS classification criteria

Canada - WHMIS - Ingredient Disclosure List

• 1,2-Propanediol	57-55-6	1 %
• Water	7732-18-5	Not Listed

Environment

Canada - CEPA - Priority Substances List

• 1,2-Propanediol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• 1,2-Propanediol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• 1,2-Propanediol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• 1,2-Propanediol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• 1,2-Propanediol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• 1,2-Propanediol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - OSHA - Specifically Regulated Chemicals

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - California - Proposition 65 - Developmental Toxicity

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

- | | | |
|-------------------|-----------|------------|
| • 1,2-Propanediol | 57-55-6 | Not Listed |
| • Water | 7732-18-5 | Not Listed |

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• 1,2-Propanediol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed
U.S. - California - Proposition 65 - Reproductive Toxicity - Female		
• 1,2-Propanediol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed
U.S. - California - Proposition 65 - Reproductive Toxicity - Male		
• 1,2-Propanediol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Last Revision Date

- 08/May/2014

Preparation Date

- 25/July/2012

Disclaimer/Statement of Liability

- The information contained herein is based on data considered accurate which has been obtained from other companies and organizations. However, no warranty or representation is expressed or implied that the information, is accurate, complete or representative. Firestone Building Products Company, LLC assumes no responsibility for injury to the buyer, the buyer's employees, or any third persons, if reasonable safety procedures are not followed. Additionally, Firestone Building Products Company assumes no responsibility for injury to buyer, the buyer's employees, or any third persons caused by abnormal use of this material, even if reasonable safety procedures are followed.

Key to abbreviations

NDA = No Data Available