

## Safety Data Sheet

## Firestone Building Products Company

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

#### 1.1 Product identifier

**Product Name** • **Modular Water Based Bonding Adhesive WBA 3781**

#### 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

firestonemsds@bfdp.com

**Telephone (General)** • 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 2015/830]

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

**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.  
P280 - Wear eye/face protection , .

**Response** • P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P312 - Call a POISON CENTER/doctor/ 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  
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation

### 2.2 Label elements

**OSHA HCS 2012**

#### WARNING



- Hazard statements** • Causes serious eye irritation  
May cause respiratory irritation

#### Precautionary statements

- Prevention** • Avoid breathing dust, fume, gas, mist, vapours and/or spray.  
Wash thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear eye/face protection , .

- Response** • IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER/doctor if you feel unwell.  
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.

- Storage/Disposal** • Store in a well-ventilated place. Keep container tightly closed.  
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

### 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 •



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: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Propylene glycol	CAS:57-55-6 EC Number:200-338 -0	< 1%		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
Propylene glycol (57-55-6)	TWAs	10 mg/m3 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/m3 TWA (aerosol and vapor)

### 8.2 Exposure controls

#### Engineering Measures/Controls

- 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/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

##### Eye/Face

- Wear splash goggles.

##### Skin/Body

- Use protective gloves, Nitrile Gloves BT>360m, .54mm. The actual work situation is not known. Glove recommendation based upon normal product use and incidental contact only. Contact glove supplier for help with glove selection.

#### 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

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

#### 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 Basic 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/Freezing 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.		
<b>Volatility</b>			
Vapor Pressure	Data lacking	Vapor Density	> 1 Air=1
Evaporation Rate	Data lacking		
<b>Flammability</b>			
Flash Point	> 100 °C(> 212 °F)	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Not flammable.		
<b>Environmental</b>			
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

Components		
Propylene glycol (< 1%)	57-55-6	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 20 g/kg; Skin-Rabbit LD50 • 20800 mg/kg; <b>Irritation:</b> Eye-Rabbit • 100 mg • Mild irritation; Skin-Human • 500 mg 7 Day(s) • Mild irritation; Skin-Human • 104 mg 3 Day(s)-Intermittent • Moderate irritation

GHS Properties	Classification
<b>Acute toxicity</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

<b>Skin corrosion/Irritation</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Serious eye damage/Irritation</b>	EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2A
<b>Skin sensitization</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Respiratory sensitization</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Aspiration Hazard</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Carcinogenicity</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Germ Cell Mutagenicity</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Toxicity for Reproduction</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>STOT-SE</b>	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
<b>STOT-RE</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

**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 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
Propylene glycol	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
Propylene glycol	57-55-6	Yes	No	Yes	No	Yes
Water	7732-18-5	Yes	No	Yes	No	Yes

**Canada**

**Labor**

**Canada - WHMIS - Classifications of Substances**

• Propylene glycol	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**

• Propylene glycol	57-55-6	1 %
• Water	7732-18-5	Not Listed

**Environment**

**Canada - CEPA - Priority Substances List**

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

**Europe**

**Other**

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

**United States****Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

**U.S. - OSHA - Specifically Regulated Chemicals**

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

**United States - California****Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed

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

• Propylene glycol	57-55-6	Not Listed
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• Water	7732-18-5	Not Listed
<b>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</b>		
• Propylene glycol	57-55-6	Not Listed
• Water	7732-18-5	Not Listed
<b>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</b>		
• Propylene glycol	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

<b>Revision Date</b>	• 05/August/2016
<b>Preparation Date</b>	• 09/February/2009
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### Key to abbreviations

NDA = No Data Available