

# Material Safety Data Sheet



## Section 1 - Product and Company Identification

<b>Material Name</b>	- <b>2172-9-66 - Premium All Weather Plastic Roof Cement</b>
<b>Chemical Category</b>	- Mixture
<b>Product Code</b>	- 2172-9-66
<b>Product Description</b>	- Black paste.
<b>Product Use</b>	- Repair cracks, seams and holes in roofing materials.
<b>Synonyms</b>	- Plastic roof and flashing cement
<b>Manufacturer</b>	- Gardner-Gibson 4161 E. 7th Avenue Tampa, FL 33605 United States www.gardner-gibson.com Please use "Contact Us" form on the website
<b>Telephone</b>	
<b>Technical</b>	- 813-248-2101 - Customer Service: 8 AM - 5 PM M-F Eastern Standard Time
<u><b>Emergency</b></u>	- 800-424-9300 - CHEMTREC
<u><b>Emergency</b></u>	- 703-527-3887 - CHEMTREC (Outside US)
<b>Preparation Date</b>	- 7/22/2011
<b>Last Revision Date</b>	- 7/22/2011

## Section 2 - Hazards Identification

### EMERGENCY OVERVIEW

#### CAUTION

*Combustible liquid. Harmful if inhaled. Harmful if swallowed. Causes mild skin irritation. Causes eye irritation.*

<b>Prevention</b>	Avoid breathing dust, fume, gas, mist, vapours and/or spray. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces. - No smoking. Use personal protective equipment as required. Keep out of reach of children.
<b>Response</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
<b>Storage/Disposal</b>	Store in a closed container. Store in a well-ventilated place. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



*CAUTION! COMBUSTIBLE LIQUID. Central nervous system depressant. Vapor may cause light-headedness, headache, nausea, loss of coordination and respiratory tract irritation. May cause skin irritation.*

<b>Physical Form</b>	- Liquid
<b>Color</b>	- Black
<b>Odor</b>	- Petroleum solvent odor.

**Flash Point**

- 105 F(40.5556 C)

**OSHA**

- Combustible Liquid, Irritant, Carcinogen

**WHMIS**

- Class B - Flammable and Combustible Materials - Division 3, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A



- R65, R25, R36/37/38, R45

**GHS**

- Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A

**Route Of Entry**

- Inhalation, Skin, Eye, Ingestion/Oral

**NFPA****Potential Health Effects****Inhalation****Acute (Immediate)**

- May cause irritation. Excessive breathing of high vapor concentration can cause possible unconsciousness and even asphyxiation.

**Chronic (Delayed)**

- Refer to other information found in Section 11-Toxicology.

**Skin****Acute (Immediate)**

- May cause irritation.

**Chronic (Delayed)**

- Repeated and prolonged exposure to the skin may cause dermatitis.

**Eye****Acute (Immediate)**

- May cause irritation.

**Chronic (Delayed)**

- Repeated and prolonged exposure may cause irritation.

**Ingestion****Acute (Immediate)**

- May be harmful or fatal if swallowed.

**Chronic (Delayed)**

- Repeated and prolonged exposure may be harmful.

**Carcinogenic Effects**

- This product or one of its ingredients present at 0.1% or more is listed as a carcinogen by NTP, IARC or OSHA. See Section 11 - Toxicological Information for more details.

**Carcinogenic Effects**

	CAS	IARC	NTP
Asphalt	8052-42-4	Group 2B-Possible Carcinogen	Under Consideration

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

Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	EU R & S Phrases	Other
Asphalt	8052-42-4	30% TO 40%	NA1999, 232-490-9	Ingestion/Oral-Rat LD50 · >5000 mg/kgInhalation-Rat LC50 · >94.4 mg/m <sup>3</sup>	NDA	NDA
mineral spirits	8052-41-3	8% TO 15%	232-489-3		Carc.Cat.2; R45 Muta.Cat.2; R46 Xn;	NDA

Hazardous Components						
Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	EU R & S Phrases	Other
					R65	
Cellulose	9004-34-6	2% TO 6%	232-674-9	Ingestion/Oral-Rat LD50 · >5 g/kg Inhalation-Rat LC50 · >5800 mg/m <sup>3</sup> 4 Hour(s) Skin-Rabbit LD50 · >2 g/kg	NDA	NDA
Bentonite	1302-78-9	1% TO 5%	215-108-5	NDA	NDA	NDA
1,2,4-Trimethylbenzene	95-63-6	< 1%	202-436-9	Ingestion/Oral-Rat LD50 · 5 g/kg Inhalation-Rat LC50 · 18000 mg/m <sup>3</sup> 4 Hour(s)	R10 Xn; R20 Xi; R36/37/38 N; R51 R53	NDA
Benzene, 1,3,5-trimethyl	108-67-8	< 1%	UN2325, 203-604-4		R10 Xi; R37 N; R51 R53	NDA
Surfactant	30113-45-2	< 0.5%	250-056-7		NDA	NDA
Non-Hazardous Components						
Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	EU R & S Phrases	Other
Water	7732-18-5	35% TO 45%	231-791-2		NDA	NDA

**This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.**

See Section 11 for Toxicological Information.

#### Section 4 - First Aid Measures

- Inhalation** - IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell. Move victim to fresh air. If breathing is difficult, give oxygen.
- Skin** - IF ON SKIN: Wash with plenty of soap and water. If irritation develops and persists, get medical attention.
- Eye** - 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.
- Ingestion** - If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

#### Section 5 - Fire Fighting Measures

- Extinguishing Media** - LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical, CO<sub>2</sub>, water spray or regular foam.
- Unsuitable Extinguishing Media** - Do not use direct stream of water.
- Firefighting Procedures** - Fight advanced or massive fires from safe distance or protected location. Avoid water in a straight hose stream as the stream will cause splatter and spread fire. If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.
- Unusual Fire and Explosion Hazards** - Combustible liquid.  
May release irritating or toxic gases, fumes, or vapors.
- Hazardous Combustion Products** - Carbon monoxide, carbon dioxide, hydrocarbons.

- Protection of Firefighters** - Firefighters should wear self-contained breathing apparatus and full protective gear.
- Flash Point** - 105 F(40.5556 C) CC (Closed Cup)
- Explosion Limits**
- Upper** - 6 %
- Lower** - .9 %
- Autoignition Temperature** - 450 F(232.2222 C)

## Section 6 - Accidental Release Measures

- Personal Precautions** - Do not touch damaged containers or spilled material unless wearing appropriate protective clothing Stay upwind Ventilate the area before entry
- Emergency Procedures** - ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) Stop leak if you can do it without risk Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up Keep unauthorized personnel away
- Environmental Precautions** - Prevent entry into waterways, sewers, basements or confined areas
- Containment/Clean-up Measures** - Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Do not use water to flush spill area. Use appropriate Personal Protective Equipment (PPE)
- Prohibited Materials** - Avoid contact with strong oxidizing agents

## Section 7 - Handling and Storage

- Handling** - KEEP OUT OF THE REACH OF CHILDREN! Keep away from heat and ignition sources – No Smoking. Use only with adequate ventilation.
- Storage** - Store in a well-ventilated place. Keep container tightly closed. Keep container/package tightly closed in a cool, well-ventilated place. No open flames, no sparks and no smoking.
- Special Packaging Materials** - No data available
- Incompatible Materials or Ignition Sources** - Avoid contact with strong oxidizing agents and acids.

## Section 8 - Exposure Controls/Personal Protection

### Personal Protective Equipment Pictograms



- Respiratory** - In case of insufficient ventilation, wear suitable respiratory equipment. If listed exposure limits are expected to be exceeded, use approved respiratory protection suitable for the hazard.
- Eye/Face** - Wear ANSI approved safety glasses with side shields or safety goggles.
- Hands** - Wear chemical protective gloves made of Nitrile or Neoprene.
- Skin/Body** - Wear clothing that covers the skin to prevent skin exposure.
- General Industrial Hygiene Considerations** - Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Avoid breathing vapors.
- Engineering Measures/Controls** - Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

**Exposure Limits/Guidelines**

	Result	ACGIH	Canada Ontario	OSHA	United States - California
Cellulose (9004-34-6)	TWAs	10 mg/m3 TWA	10 mg/m3 TWAEV (paper fibre, total dust)	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	10 mg/m3 PEL (total dust); 5 mg/m3 PEL (respirable fraction)
mineral spirits (8052-41-3)	TWAs	100 ppm TWA	525 mg/m3 TWAEV	500 ppm TWA; 2900 mg/m3 TWA	100 ppm PEL; 525 mg/m3 PEL
Asphalt (8052-42-4)	TWAs	0.5 mg/m3 TWA (as benzene soluble aerosol, fume, inhalable fraction)	0.5 mg/m3 TWAEV (fume, inhalable, as benzene-soluble aerosol)	Not established	5 mg/m3 PEL (fume)

Exposure Control Notations

ACGIH

- Asphalt (8052-42-4):Carcinogens:A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)

**Key to abbreviations**

- PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)
- TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

**Section 9 - Physical and Chemical Properties**

- Physical Form** - Liquid
- Appearance/Description** - Black paste.

<b>Color:</b> Black		<b>Odor:</b> Petroleum solvent odor.	
<b>Taste:</b> NDA		<b>Odor Threshold:</b> NDA	
<b>Boiling Point:</b>	300 to 400 F(148.8889 to 204.4444 C)	<b>Vapor Pressure:</b>	= 2 mmHg (torr) @ 68 F(20 C)
<b>Melting Point:</b>	NDA	<b>Vapor Density:</b>	= 1 Air=1
<b>Specific Gravity/Relative Density:</b>	= 1.046 Water=1	<b>Evaporation Rate:</b>	NDA
<b>Density:</b>	= 8.71 lbs/gal	<b>VOC (Wt.):</b>	= 1.66 lbs/gal
<b>Bulk Density:</b>	NDA	<b>VOC (Vol.):</b>	< 200 g/L
<b>pH:</b>	NDA	<b>Volatiles (Wt.):</b>	NDA
<b>Water Solubility:</b>	NDA	<b>Volatiles (Vol.):</b>	= 60 %
<b>Solvent Solubility:</b>	Yes	<b>Flash Point:</b>	105 F(40.5556 C)
<b>Viscosity:</b>	NDA	<b>Flash Point Test Type:</b>	CC (Closed Cup)
<b>Half-Life:</b>	NDA		
<b>Octanol/Water Partition coefficient:</b>	NDA		
<b>Coefficient of Water:</b>	NDA	<b>Autoignition:</b>	450 F(232.2222 C)
<b>Bioaccumulation Factor:</b>	NDA	<b>Bioconcentration Factor:</b>	NDA
<b>Biochemical Oxygen Demand BOD/BOD5:</b>	NDA	<b>Chemical Oxygen Demand:</b>	NDA
<b>Persistence:</b>	NDA	<b>Degradation:</b>	NDA

**Section 10 - Stability and Reactivity**

- Stability** - Stable under normal temperatures and pressures.
- Hazardous Polymerization** - Hazardous polymerization will not occur.
- Conditions to Avoid** - Avoid contact with strong oxidizing agents and flame.
- Incompatible Materials** - Strong oxidizers and acids.

**Hazardous Decomposition Products**

- Carbon monoxide, carbon dioxide and hydrocarbons.

**Section 11 - Toxicological Information**

Component Name	Concentration	CAS	Data
Water	35% TO 45%	7732-18-5	Acute Toxicity: ; orl-rat LD50:>90 mL/kg
Asphalt	30% TO 40%	8052-42-4	Acute Toxicity: ; orl-rat LD50:>5000 mg/kg; ihl-rat LC50:>94.4 mg/m3 Tumorigen/Carcinogen: ; skn-mus TD :69 gm/kg/43W-I; skn-mus TDLo:905 gm/kg/2Y-I
Cellulose	2% TO 6%	9004-34-6	Acute Toxicity: ; orl-rat LD50:>5 gm/kg; ihl-rat LC50:>5800 mg/m3/4H; skn-rbt LD50:>2 gm/kg
Bentonite	1% TO 5%	1302-78-9	Acute Toxicity: ; orl-mus TDLo:14 gm/kg/7D-I
1,2,4-Trimethylbenzene	< 1%	95-63-6	Acute Toxicity: ; orl-rat LD50:5 gm/kg; ihl-rat LC50:18000 mg/m3/4H

**Other Component Information** - IARC has concluded that the following chemicals in this product are carcinogenic to humans (Group 1): silica, quartz. ACGIH has designated the following chemicals in this product as suspected human carcinogens (A2): silica, quartz. NTP has listed the following chemicals in this product as known human carcinogens: silica, quartz. Risk of cancer depends on duration and level of exposure to this product as a dust or aerosol mist.

**Other Information** - This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Occupational Safety and Health (NIOSH), has concluded that at higher temperatures roofing asphalt fumes are a potential occupational carcinogen. If this product is heated or comes in contact with heated material, avoid breathing fumes. This product may contain small amounts of polycyclic aromatic hydrocarbons (PAH's) which are recognized carcinogens in humans and experimental animals. Mouse skin painting studies of roofing asphalt vapor concentrate have shown evidence of tumor formation associated with localized skin irritation in recent studies. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage.

**Key to abbreviations**

- TC = Toxic Concentration
- TD = Toxic Dose

**Section 12 - Ecological Information**

**Ecological Fate** - No data available.  
**Persistence/Degradability** - No data available.  
**Bioaccumulation Potential** - No data available.  
**Mobility in Soil** - No data available.

**Section 13 - Disposal Considerations**

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

## Section 14 - Transportation Information

**DOT – Department of Transportation** - Not Regulated when shipped in containers <119 gallons.

**TDG Transportation Other Information**: Not Restricted under General Exemption for small container packaging.

**TDG - Canada Transportation of Dangerous Goods**: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III 1.33 Class 3, Flammable Liquids

**IMO/IMDG –International Maritime Transport** ▪ IMDG Code 2.3.2.5 - exempted from marking, labeling & testing of packages.

**IATA - International Air Transport Association** - TARS, LIQUID; UN1999; Hazard Class: 3; Packing Group: III.

## Section 15 - Regulatory Information

### SARA Hazard Classifications

- Acute, Chronic

### Risk & Safety Phrases

- California PROP 65: Asphalt and Asphalt Fumes may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm. .

#### State Right To Know

Component	CAS	MA	MN	NJ	PA
Water	7732-18-5	No	No	No	No
Asphalt	8052-42-4	Yes	Yes	Yes	Yes
mineral spirits	8052-41-3	Yes	Yes	Yes	Yes
Cellulose	9004-34-6	Yes	Yes	Yes	Yes
Bentonite	1302-78-9	No	No	No	No
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes	Yes	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes	No	No	No
Surfactant	30113-45-2	No	No	No	No

#### Inventory

Component	CAS	EU EINECS	TSCA
Water	7732-18-5	Yes	Yes
Asphalt	8052-42-4	Yes	Yes
mineral spirits	8052-41-3	Yes	Yes
Cellulose	9004-34-6	Yes	Yes
Bentonite	1302-78-9	Yes	Yes
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes	Yes
Surfactant	30113-45-2	Yes	Yes

Canada

Labor

### Canada - WHMIS - Classifications of Substances

▪ Cellulose	9004-34-6	2% TO 6%	Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers)
-------------	-----------	----------	---

▪ Asphalt	8052-42-4	30% TO 40%	Not Listed
▪ 1,2,4-Trimethylbenzene	95-63-6	< 1%	B3
▪ Bentonite	1302-78-9	1% TO 5%	D2A
▪ Water	7732-18-5	35% TO 45%	Uncontrolled product according to WHMIS classification criteria
▪ mineral spirits	8052-41-3	8% TO 15%	B3, D2B
▪ Benzene, 1,3,5-trimethyl	108-67-8	< 1%	B3
▪ Surfactant	30113-45-2	< 0.5%	Not Listed

**United States**

Environment			
<b>U.S. - CERCLA/SARA - Section 313 - Emission Reporting</b>			
▪ Cellulose	9004-34-6	2% TO 6%	Not Listed
▪ Asphalt	8052-42-4	30% TO 40%	Not Listed
▪ 1,2,4-Trimethylbenzene	95-63-6	< 1%	1.0 % de minimis concentration
▪ Bentonite	1302-78-9	1% TO 5%	Not Listed
▪ Water	7732-18-5	35% TO 45%	Not Listed
▪ mineral spirits	8052-41-3	8% TO 15%	Not Listed
▪ Benzene, 1,3,5-trimethyl	108-67-8	< 1%	Not Listed
▪ Surfactant	30113-45-2	< 0.5%	Not Listed

**Section 16 - Other Information**

- Last Revision Date** - 7/22/2011
- Prepared By** - Gardner-Gibson
- Preparation Date** - 7/22/2011
- Disclaimer/Statement of Liability** - This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to verify the suitability and completeness of such information for particular use. Gardner-Gibson does not accept liability for any loss or damage that may occur from the use of this information.