Material Safety Data Sheet

Section 1 - Product and Company Identification

Material Name	-	**0105-GA Fibered Asphalt Roof Coating**
Chemical Category	-	Mixture
Product Code	-	0105-GA
Product Description	-	Black fibered asphalt roof and foundation coating.
Product Use	-	Asphalt Based Roof and Foundation Coating.
Synonyms	-	Asphalt Roof Coating Gardner
Manufacturer	-	Gardner-Gibson 4161 E. 7th Avenue Tampa, FL 33605 United States www.gardner-gibson.com Please use "Contact Us" form on the website
Telephone		
Technical	-	813-248-2101
Emergency	-	800-424-9300
Emergency	-	703-527-3887
Preparation Date	-	7/14/2011
Last Revision Date	-	7/14/2011

Section 2 - Hazards Identification

EMERGENCY OVERVIEW

CAUTION

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

Prevention	Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, gas, mist, vapours and/or spray. Keep away from flames and hot surfaces. - No smoking. Wear protective gloves, clothing, and eye/face protection.
Response	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
Storage/Disposal	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 depressent. Vapor may cause light-headedness, headache, nausea, loss of coordination and respiratory tract irritation. May cause skin irritation.

Physical Form	-	Liquid
Color	-	Black
Odor	-	Mild Hydrocarbon.
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 may be harmful. 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			
	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	45% TO 50%	NA1999, 232-490-9	Ingestion/Oral-Rat LD50 · >5000 mg/kgInhalation-Rat LC50 · >94.4 mg/m³	NDA	NDA
Mineral Spirits	8052-41-3	15% TO 25%	232-489-3		Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65	NDA
1,2,4-	95-63-	1% TO	202-436-9	Ingestion/Oral-Rat LD50 · 5 g/kg	R10 Xn; R20 Xi;	NDA

Hazardous Components						
Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	EU R & S Phrases	Other
Trimethylbenzene	6	5%			R36/37/38 N; R51 R53	
Bentonite	1302-78-9	1% TO 5%	215-108-5		NDA	NDA
Benzene, 1,3,5-trimethyl	108-67-8	1% TO 5%	UN2325, 203-604-4		R10 Xi; R37 N; R51 R53	NDA
Cellulose	9004-34-6	1% TO 5%	232-674-9	Ingestion/Oral-Rat LD50 · >5 g/kgInhalation-Rat LC50 · >5800 mg/m³ 4 Hour(s)	NDA	NDA
Non-Hazardous Components						
Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	EU R & S Phrases	Other
Water	7732-18-5	25% TO 30%	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 - Move victim to fresh air. Call a physician or poison control center immediately. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

Skin - Immediately flush skin with soap and plenty of water. Call a physician if symptoms occur. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse.

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.

Notes to Physician - Aspiration of liquid into the lungs during swallowing or vomiting can cause lung inflammation, serious lung damage and even death from chemical pneumonitis.

Section 5 - Fire Fighting Measures

Extinguishing Media - LARGE FIRE: Water spray, fog or regular foam.
SMALL FIRES: Dry chemical, CO2, 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.
Containers may explode when heated.
May release irritating or toxic gases, fumes, or vapors.

Hazardous Combustion Products - Carbon monoxide, carbon dioxide, hydrocarbons.

Protection of Firefighters	-	Fire fighters should wear complete protective clothing including self-contained breathing apparatus.
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	-	If you have not donned special protective clothing approved for this material, do not expose yourself to any risk of this material touching you Stay upwind Ventilate the area before entry
Emergency Procedures	-	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) 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
Environmental Precautions	-	Prevent entry into waterways, sewers, basements or confined areas Do NOT wash away into sewer
Containment/Clean-up Measures	-	Contain and recover liquid when possible. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Do not flush to sewer or allow to enter waterways. Do not use water to flush spill area. Use appropriate Personal Protective Equipment (PPE)
Prohibited Materials	-	Avoid contact with strong oxidizing agents and acids.

Section 7 - Handling and Storage

Handling	-	KEEP OUT OF THE REACH OF CHILDREN! Keep away from heat and ignition sources. Keep away from fire - No Smoking. Do not use in areas without adequate ventilation.
Storage	-	Store in a well-ventilated place. Keep container tightly closed. 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 respirtory 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 - Thick black semi-liquid.

Color: Black		**Odor**: Mild Hydrocarbon.	
Taste: NDA		**Odor Threshold**: NDA	
Boiling Point:	315 to 550 F(157.2222 to 287.7778 C)	**Vapor Pressure:**	= 2 mmHg (torr) @ 68 F(20 C)
Melting Point:	NDA	**Vapor Density:**	= 4.9 Air=1
Specific Gravity/Relative Density:	= 0.98 Water=1	**Evaporation Rate:**	NDA
Density:	= 8.1781 lbs/gal	**VOC (Wt.):**	NDA
Bulk Density:	NDA	**VOC (Vol.):**	= 250 g/L
pH:	NDA	**Volatiles (Wt.):**	NDA
Water Solubility:	NDA	**Volatiles (Vol.):**	= 22 %
Solvent Solubility:	NDA	**Flash Point:**	105 F(40.5556 C)
Viscosity:	= 270 Centipoise (cPs, cP) or mPas @ 140 F(60 C)	**Flash Point Test Type:**	CC (Closed Cup)
Half-Life:	NDA		
Octanol/Water Partition coefficient:	NDA		
Coefficient of Water:	NDA	**Autoignition:**	450 F(232.2222 C)
Bioaccumulation Factor:	NDA	**Bioconcentration Factor:**	NDA
Biochemical Oxygen Demand BOD/BOD5:	NDA	**Chemical Oxygen Demand:**	NDA
Persistence:	NDA	**Degradation:**	NDA

Section 10 - Stability and Reactivity

Stability - Stable under normal temperatures and pressures.

Hazardous Polymerization - Hazardous polymerization not indicated.

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
Asphalt	45% TO 50%	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
Bentonite	1% TO 5%	1302-78-9	Acute Toxicity: ; orl-mus TDLo:14 gm/kg/7D-I; orl-rat TDLo:700 mg/kg/7D-I Tumorigen/Carcinogen: ; orl-mus TDLo:12000 gm/kg/28W-C
Benzene, 1,3,5-trimethyl	1% TO 5%	108-67-8	Acute Toxicity: ; orl-rat LD50:5000 mg/kg; ihl-hmn TCLo:10 ppm Irritation: ; skn-rbt 20 mg/24H MOD
Cellulose	1% TO 5%	9004-34-6	Acute Toxicity: ; orl-rat LD50:>5 gm/kg; ihl-rat LC50:>5800 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.

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

IMO/IMDG Transportation Other Information - IMDG Code 2.3.2.5 - exempted from marking, labeling & testing of packages.

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	NJ	PA
Water	NDA	No	No	No
Asphalt	8052-42-4	Yes	Yes	Yes
Mineral Spirits	8052-41-3	Yes	Yes	Yes
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes	Yes
Bentonite	1302-78-9	No	No	No
Benzene, 1,3,5-trimethyl	108-67-8	Yes	No	No
Cellulose	9004-34-6	Yes	Yes	Yes

Inventory		
Component	CAS	TSCA
Water	NDA	No
Asphalt	8052-42-4	Yes
Mineral Spirits	8052-41-3	Yes
1,2,4-Trimethylbenzene	95-63-6	Yes
Bentonite	1302-78-9	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes
Cellulose	9004-34-6	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

▪ Cellulose	9004-34-6	1% TO 5%	Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers)
▪ Asphalt	8052-42-4	45% TO 50%	Not Listed
▪ Bentonite	1302-78-9	1% TO 5%	D2A
▪ Mineral Spirits	8052-41-3	15% TO 25%	B3, D2B
▪ Benzene, 1,3,5-trimethyl	108-67-8	1% TO 5%	B3

United States

Environment

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

▪ Cellulose	9004-34-6	1% TO 5%	Not Listed
▪ Asphalt	8052-42-4	45% TO 50%	Not Listed
▪ Bentonite	1302-78-9	1% TO 5%	Not Listed
▪ Mineral Spirits	8052-41-3	15% TO 25%	Not Listed
▪ Benzene, 1,3,5-trimethyl	108-67-8	1% TO 5%	Not Listed

United States - California

Environment

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

▪ Cellulose	9004-34-6	1% TO 5%	Not Listed
▪ Asphalt	8052-42-4	45% TO 50%	Not Listed
▪ Bentonite	1302-78-9	1% TO 5%	Not Listed
▪ Mineral Spirits	8052-41-3	15% TO 25%	Not Listed
▪ Benzene, 1,3,5-trimethyl	108-67-8	1% TO 5%	Not Listed

Section 16 - Other Information

Last Revision Date - 7/14/2011

Prepared By - Gardner-Gibson

Preparation Date - 7/14/2011

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.