Safety Data Sheet
5175-A-30
09-26-14

Section 1 - Product and Company Identification

Material Name	-	**Silver Seal 300 Fibered Aluminum Roof Coating**
Chemical Category	-	Mixture
Product Code	-	5175-A-30
Product Description	-	Asphalt Based Aluminium Reflective Roof Coating.
Product Use	-	Roof Coating.
Synonyms	-	Fibered Aluminum Roof Coating
Manufacturer	-	Gardner-Gibson 4161 E. 7th Avenue Tampa, FL 33605 United States
Telephone		
Technical	-	813-248-2101 - Customer Service: 8 AM - 5 PM M-F Eastern Standard Time
Emergency	-	800-424-9300 - CHEMTREC
Emergency	-	703-527-3887 - CHEMTREC (Outside US)
Last Revision Date	-	9-26-14

Section 2 - Hazards Identification

Signal Word: WARNING!

Hazards and Precautions

Flammable Liquid and Vapor per HCS2012. Contains Combustible Petroleum Distillates. Keep away from heat, sparks, and open flame. Keep container tightly closed when not in use. Contains Aluminum Pigment. Avoid contact with water. Contact with water can liberate highly flammable hydrogen gas. Avoid prolonged breathing of vapor and use only in adequate ventilation. Repeated and prolonged overexposure to solvent vapor may cause brain and nervous system damage. May cause skin and eye irritation. Harmful or Fatal if swallowed. Use safety glasses, gloves, and skin protection when using this product. Protect building fresh air inlets from product vapors. Do not use in drinking water or food systems. Dispose in accordance to Federal, State, and local regulations. Do not reuse empty container.

Prevention	Do not handle until all safety precautions have been read and understood. Avoid breathing dust, fume, gas, mist, vapours and/or spray. Keep away from flames and hot surfaces. - No smoking. Wear protective gloves-Neoprene or Nitrile, clothing -Cover Skin, and eye/face protection -Safety Glasses, .
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.

Physical Form	-	Liquid
Color	-	Black
Odor	-	Mild Hydrocarbon.
Flash Point	-	105°F
OSHA(HCS2012)	-	Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye

Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A

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

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. Likely to cause eye irritation, burning, tearing, etc. on contact with the eyes. If swelling and irritation persist, seek medical attention.

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**	**Classifications According to Regulation/Directive**	**Other**
Mineral Spirits	8052-41-3	30% TO 45%	232-489-3		Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65	NDA
Asphalt	8052-42-4	30% TO 40%	NA1999, 232-490-9	Ingestion/Oral-Rat LD50 · >5000 mg/kgInhalation-Rat LC50 · >94.4 mg/m³	**WHMIS:** Other Toxic Effects - D2A**UN GHS:** Carc. 2; Eye Irrit. 2A; Skin Irrit. 2	NDA
Aluminum	7429-90-5	5% TO 10%	231-072-3		Water React. **UN GHS:** Pyr. Sol. 1; Water-react. 2	NDA
Perlite	130885-09-5	5% TO 10%			**WHMIS:** Other Toxic Effects - D2B **UN GHS:** Eye Irrit. 2A; Skin Irrit. 2	NDA

Hazardous Components						
Chemical Name	**CAS**	**%(wt)**	**UN;EINECS**	**LD50/LC50**	**Classifications According to Regulation/Directive**	**Other**
1,2,4-Trimethylbenzene	95-63-6	1% TO 5%	202-436-9	Ingestion/Oral-Rat LD50 · 5 g/kg	R10 Xn; R20 Xi; R36/37/38 N; R51 R53	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)	**WHMIS:** Other Toxic Effects - D2B **UN GHS:** Eye Irrit. 2A; Skin Irrit. 2	NDA
Solvent naphtha (petroleum), light aromatic	64742-95-6	0.1% TO 5%	265-199-0	Ingestion/Oral-Rat LD50 · 8400 mg/kg	**UN GHS:** Asp. Tox. 1; Carc. 1B Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65	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. If signs/symptoms continue, get medical attention. 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 water stream as it may splatter the burning product.

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(40.56°C) CC (Closed Cup)
Explosion Limits		
Upper	-	6 %
Lower	-	0.9 %

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) 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	**Canada Ontario**	**Mexico**	**NIOSH**	**OSHA**	**United States - California**
Cellulose (9004-34-6)	TWAs	10 mg/m3 TWAEV (paper fibre, total dust)	10 mg/m3 TWA	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable 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)
1,2,4-Trimethylbenzene (95-63-6)	TWAs	Not established	Not established	25 ppm TWA; 125 mg/m3 TWA	Not established	Not established
Benzene, 1,3,5-trimethyl (108-67-8)	TWAs	Not established	Not established	25 ppm TWA; 125 mg/m3 TWA	Not established	Not established
Aluminum (7429-90-5)	TWAs	5 mg/m3 TWAEV (powder); 10 mg/m3 TWAEV (metal and oxide dust)	10 mg/m3 TWA (dust)	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable 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)
Asphalt (8052-42-4)	TWAs	0.5 mg/m3 TWAEV (fume, inhalable, as benzene-soluble aerosol)	5 mg/m3 TWA	Not established	Not established	5 mg/m3 PEL (fume)
Mineral Spirits (8052-41-3)	TWAs	525 mg/m3 TWAEV	100 ppm TWA; 523 mg/m3 TWA	350 mg/m3 TWA	500 ppm TWA; 2900 mg/m3 TWA	100 ppm PEL; 525 mg/m3 PEL

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.
Odor Threshold:	No data available	**Boiling Point:**	300 to 390°F
Heat of Decomposition:	Not relevant	**pH:**	Not relevant
Specific Gravity/Relative Density:	= 0.98 Water=1	**Density:**	= ~8.11 lbs/gal
Bulk Density:	Not relevant	**Water Solubility:**	No
Solvent Solubility:	Not relevant	**Viscosity:**	= 270 Centipoise (cPs, cP) or mPas @ 140 F(60 C)
Vapor Pressure:	= 2 mmHg (torr) @ 68 F(20 C)	**Vapor Density:**	= 4.9 Air=1
Evaporation Rate:	< 1 Ether = 1	**VOC (Wt.):**	Not relevant
VOC (Vol.):	< 450 g/L	**Volatiles (Wt.):**	No data available
Volatiles (Vol.):	No data available	**Flash Point:**	105 F(40.5556 C)
Flash Point Test Type:	CC (Closed Cup)	**UEL:**	6 %
LEL:	0.9 %	**Heat of Combustion (ΔHc):**	Not relevant

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	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
1,2,4-Trimethylbenzene	1% TO 5%	95-63-6	Acute Toxicity: ; orl-rat LD50:5 gm/kg; ihl-rat LC50:18000 mg/m3/4H
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
Solvent naphtha (petroleum), light aromatic	0.1% TO 5%	64742-95-6	Acute Toxicity: ; orl-rat LD50:8400 mg/kg

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 - United States - Department of Transportation - Not Regulated when shipped in containers < 119 gallons (450 L)
TDG - Canada Transportation of Dangerous Goods: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III
TDG Transportation Other Information: 1.33 -Not Restricted under General Exemption for small container packaging.

IMO/IMDG –International Maritime Transport: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III
IMO/IMDG Transportation Other Information-IMDG Code 2.3.2.5 - exempted from marking, labeling & testing of packages.
IATA - International Air Transportation 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. Bituminous Fumes are PROP 65 listed. Asphalt is considered a bituminous material but would need to be heated in excess of 500°F to release fumes necessary for exposure. Normal use of this product does not require heating and the material is not recommended for heating by the manufacture. .

Other Flammability Rating Per NFPA and DOT the product is classified as a combustible liquid.

State Right To Know				
Component	**CAS**	**MA**	**NJ**	**PA**
Styrene/Butadiene Polymer	9003-55-8	No	No	No
Mineral Spirits	8052-41-3	Yes	Yes	Yes
Asphalt	8052-42-4	Yes	Yes	Yes
Aluminum	7429-90-5	Yes	Yes	Yes
Perlite	130885-09-5	No	No	No
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes	No	No
Cellulose	9004-34-6	Yes	Yes	Yes
Solvent naphtha (petroleum), light aromatic	64742-95-6	No	No	No

Inventory			
Component	**CAS**	**EU EINECS**	**TSCA**
Styrene/Butadiene Polymer	9003-55-8	No Data	Yes
Mineral Spirits	8052-41-3	Yes	Yes
Asphalt	8052-42-4	Yes	Yes
Aluminum	7429-90-5	Yes	Yes
Perlite	130885-09-5	No Data	Yes
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes	Yes
Cellulose	9004-34-6	Yes	Yes
Solvent naphtha (petroleum), light aromatic	64742-95-6	Yes	Yes

Canada - WHMIS - Classifications of Substances

- Cellulose	9004-34-6	1% TO 5%	Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers)
- Aluminum	7429-90-5	5% TO 10%	B6 (powder); Uncontrolled product according to WHMIS classification criteria
- 1,2,4-Trimethylbenzene	95-63-6	1% TO 5%	B3
- Solvent naphtha (petroleum), light aromatic	64742-95-6	0.1% TO 5%	B3, D2B
- Perlite	130885-09-5	5% TO 10%	D2A (ore, containing >0.1% Crystalline silica); Uncontrolled product according to WHMIS classification criteria (ore)
- Mineral Spirits	8052-41-3	30% TO 45%	B3, D2B
- Benzene, 1,3,5-trimethyl	108-67-8	1% TO 5%	B3

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

- Aluminum	7429-90-5	5% TO 10%	1.0 % de minimis concentration (dust or fume only)
- 1,2,4-Trimethylbenzene	95-63-6	1% TO 5%	1.0 % de minimis concentration

Section 16 - Other Information

Last Revision Date - 9/25/2014

Prepared By - GG Inc.

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. The manufacturer does not accept liability for any loss or damage that may occur from the use of this information.

NFPA