

Section 1 - Product and Company Identification

Material Name Silvershield Premium SEBS Aluminum Coating Chemical Category • Mixture **Product Code** • AP-5355 Product Description • Asphalt Based Aluminium Reflective Roof Coating. Product Use Aluminum Roof Coating Manufacturer • APOC 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)

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.

PreventionDo not handle until all safety precautions have been read and understood. Avoid breathing dust,
fume, gas, mist, vapors 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.



Physical Form• LiquidColor• Black

Odor Flash Point	 Mild Hydrocarbon. 105°F(40.5°C) CC (Closed Cup)
UEL	• 6 %
LEL	• 0.9 %
OSHA(HCS2012	 Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
WHMIS	 Combustible Liquids - B3, Other Toxic Effects - D2A, Other Toxic Effects - D2B
GHS	 Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
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 (Immedia	te) • 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	Identifiers	%(weight) LD50/LC50		Classifications According to Regulation/Directive			
Mineral Spirits	CAS:8052-41-3 EC Number:232-489-3	30% TO 45%					
Asphalt	CAS:8052-42-4 UN:NA1999	30% TO 40%	Ingestion/Oral-Rat LD50 • >5000 mg/kg Inhalation-Rat LC50 • >94.4 mg/m ³	WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 2; Eye Irrit. 2A; Skin Irrit. 2			
Aluminum	CAS:7429-90-5 EC Number:231-072-3 EINECS:231-072-3	20% TO 30%		UN GHS: Pyr. Sol. 1; Water- react. 2			
Perlite	CAS:130885-09-5	5% TO 10%		WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2			
Solvent naphtha (petroleum), light aromatic	CAS:64742-95-6 EINECS:265-199-0	1% TO 2.5%		UN GHS: Asp. Tox. 1; Carc. 1B			

Benzene, 1,3,5-trimethyl	CAS:108-67-8 EC Number:203-604-4	0.5% TO 1.5%			
1,2,4-Trimethylbenzene	CAS:95-63-6 EINECS:202-436-9	0.5% TO 1%	Ingestion/Oral-Rat LD50 • 5 g/kg	WHMIS: Comb. Liq B3	

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.

0	ter The Annual Annua
See Section 111	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 eas 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 lun 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 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(40.5°C) CC (Closed Cup)			
Explosion Limits:				
Upper	• 6%			
Lower	• 0.9 %			
Autoignition Temperature	No data available			

Section 6 - Accidental Release Measures

	 Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Stay upwind. Ventilate the area before entry. 				
1	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.				
Precautions	Prevent entry into waterways, sewers, basements or confined areas. Do NOT wash away into sewer. Contain and recover liquid when possible. Contain and/or absorb spill with inert material (e.g.				

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 spark 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.

Considerations

- **General Industrial Hygiene** 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		
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	1 mg/m3 TWA (respirable)	10 mg/m3 TWA LMPE-PPT (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 TWA (fume, inhalable, as Benzene-soluble aerosol)	5 mg/m3 TWA LMPE-PPT	Not established	Not established	5 mg/m3 PEL (fume)		
Mineral Spirits (8052-41-3)	TWAs	525 mg/m3 TWA (140°C Flash aliphatic solvent)	100 ppm TWA LMPE-PPT; 523 mg/m3 TWA LMPE- PPT	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))

Section 9 - Physical and Chemical Properties

Material Description			
Physical Form:	Liquid	Appearance/Description:	Thick black semi-liquid.
Color:	Black	Odor:	Mild Hydrocarbon.
Odor Threshold:	No data available	Physical and Chemical Properties:	Liquid
General Properties			
Boiling Point	300 to 390 °F(148.8889 to 198.8889 C)	Melting Point	No data available
рН	No data available	Specific Gravity/Relative Density	0.96 Water=1
Density	~8.01 lbs/gal	Bulk Density	No data available
Water Solubility	No data available	Solvent Solubility	No data available
Viscosity	270 Centipoise (cPs, cP) or mPas @ 140 F(60 C)		
Volatility			
Vapor Pressure	2 mmHg (torr) @ 68 F(20 C)	Vapor Density	4.9 Air=1
Evaporation Rate	< 1 Ether = 1	VOC (Vol.)	< 500 g/L
Flammability			
Flash Point	105 °F(40.5 °C) CC (Closed Cup)	UEL	6 %
LEL	0.9 %	Autoignition	No data available

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	CAS	Data
Solvent naphtha (petroleum), light aromatic (1% TO 2.5%)	64742-95-6	Acute Toxicity: orl-rat LD50:8400 mg/kg
Benzene, 1,3,5-trimethyl (0.5% TO 1.5%)	108-67-8	Acute Toxicity: orl-rat LD50:5000 mg/kg; ihl-hmn TCLo:10 ppm
1,2,4-Trimethylbenzene (0.5% TO 1%)		Acute Toxicity: orl-rat LD50:5 gm/kg; ihl-rat LC50:18000 mg/m3/4H

Other

 This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Information 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.

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: Not restricted if shipped in containers <450L (119 gallons) Restricted if shipped in containers >450L (119 gallons)

TDG - Canada Transportation of Dangerous Goods: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III 1.33 Class 3. Flammable Liquids: Not Restricted under General Exemption for small container packaging.

IMO/IMDG –International Maritime Transport: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III 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.

		State Right To Know		
Component	CAS	MA	NJ	PA
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
Solvent naphtha (petroleum), light aromatic	64742-95-6	No	No	No
Benzene, 1,3,5-trimethyl	108-67-8	Yes	No	No
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes	Yes
		Inventory	-	•
Component	CAS	EU EINECS		TSCA
Mineral Spirits	8052-41-3	Yes		Yes
Asphalt	8052-42-4	Yes		Yes
Aluminum	7429-90-5	Yes		Yes
Solvent naphtha (petroleum), light aromatic	64742-95-6	Yes		Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes		Yes
1,2,4-Trimethylbenzene	95-63-6	Yes		Yes

Canada

Labor

Canada - WHMIS - Classifications of	of Substances		
•Asphalt	8052-42-4	30% TO 40%	Not Listed
•Aluminum	7429-90-5	20% TO 30%	B6 (powder); Uncontrolled product according to WHMIS classification criteria
 1,2,4-Trimethylbenzene 	95-63-6	0.5% TO 1%	B3
 Solvent naphtha (petroleum), light aromatic 	64742-95-6	1% TO 2.5%	B3, D2B
•Perlite	130885-09-5	5% TO 10%	D2A (ore, containing >0.1% Crystalline silica); Uncontrolled

			product according to WHINIS classification criteria (ore)
 Mineral Spirits 	8052-41-3	30% TO 45%	B3, D2B
 Benzene, 1,3,5-trimethyl 	108-67-8	0.5% TO 1.5%	B3

United States

Environment

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

•Asphalt	8052-42-4	30% TO 40%	Not Listed
•Aluminum	7429-90-5	20% TO 30%	1.0 % de minimis concentration (dust or fume only)
 1,2,4-Trimethylbenzene 	95-63-6	0.5% TO 1%	1.0 % de minimis concentration
•Solvent naphtha (petroleum), light aromatic	64742-95-6	1% TO 2.5%	Not Listed
•Perlite	130885-09-5	5% TO 10%	Not Listed
Mineral Spirits	8052-41-3	30% TO 45%	Not Listed
 Benzene, 1,3,5-trimethyl 	108-67-8	0.5% TO 1.5%	Not Listed

Section 16 - Other Information

Prepared By	 GG Inc.

Preparation Date

• 07/26/2010 • 5/27/2015

Last Revision Date Liability

Disclaimer/Statement of • 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. APOC does not accept liability for any loss or damage that may occur from the use of this information.

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Section 1 - Product and Company Identification

Material Name Silvershield Premium SEBS Aluminum Coating **Chemical Category** • Mixture **Product Code** • AP-5357 Product Description • Asphalt Based Aluminium Reflective Roof Coating. Product Use Aluminum Roof Coating Manufacturer • APOC 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)

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.

PreventionDo not handle until all safety precautions have been read and understood. Avoid breathing dust,
fume, gas, mist, vapors 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.



Physical Form• LiquidColor• Black

Odor Flash Point	 Mild Hydrocarbon. 105°F(40.5°C) CC (Closed Cup)
UEL	• 6 %
LEL	• 0.9 %
OSHA(HCS2012	 Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
WHMIS	 Combustible Liquids - B3, Other Toxic Effects - D2A, Other Toxic Effects - D2B
GHS	 Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
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 (Immedia	te) • 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

	Hazar	dous Compone	ents	
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive
Mineral Spirits	CAS:8052-41-3 EC Number:232-489-3	30% TO 45%		
Asphalt	CAS:8052-42-4 UN:NA1999	30% TO 40%	Ingestion/Oral-Rat LD50 • >5000 mg/kg Inhalation-Rat LC50 • >94.4 mg/m ³	WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 2; Eye Irrit. 2A; Skin Irrit. 2
Aluminum	CAS:7429-90-5 EC Number:231-072-3 EINECS:231-072-3	20% TO 30%		UN GHS: Pyr. Sol. 1; Water- react. 2
Perlite	CAS:130885-09-5	5% TO 10%		WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2
Solvent naphtha (petroleum), light aromatic	CAS:64742-95-6 EINECS:265-199-0	1% TO 2.5%		UN GHS: Asp. Tox. 1; Carc. 1B

Benzene, 1,3,5-trimethyl	CAS:108-67-8 EC Number:203-604-4	0.5% TO 1.5%			
1,2,4-Trimethylbenzene	CAS:95-63-6 EINECS:202-436-9	0.5% TO 1%	Ingestion/Oral-Rat LD50 • 5 g/kg	WHMIS: Comb. Liq B3	

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.

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See Section 111	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 eas 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 lun damage and even death from chemical pneumonitis.

Section 5 - Fire Fighting Mea	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 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(40.5°C) CC (Closed Cup)		
Explosion Limits:			
Upper	• 6%		
Lower	• 0.9 %		
Autoignition Temperature	No data available		

Section 6 - Accidental Release Measures

	Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Stay upwind. Ventilate the area before entry.
1	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.
Precautions	Prevent entry into waterways, sewers, basements or confined areas. Do NOT wash away into sewer. Contain and recover liquid when possible. Contain and/or absorb spill with inert material (e.g.

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 spark 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.

Considerations

- **General Industrial Hygiene** 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
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	1 mg/m3 TWA (respirable)	10 mg/m3 TWA LMPE-PPT (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 TWA (fume, inhalable, as Benzene-soluble aerosol)	5 mg/m3 TWA LMPE-PPT	Not established	Not established	5 mg/m3 PEL (fume)
Mineral Spirits (8052-41-3)	TWAs	525 mg/m3 TWA (140°C Flash aliphatic solvent)	100 ppm TWA LMPE-PPT; 523 mg/m3 TWA LMPE- PPT	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))

Section 9 - Physical and Chemical Properties

Material Description			
Physical Form:	Liquid	Appearance/Description:	Thick black semi-liquid.
Color:	Black	Odor:	Mild Hydrocarbon.
Odor Threshold: No data available		Physical and Chemical Properties:	Liquid
General Properties			
Boiling Point	300 to 390 °F(148.8889 to 198.8889 C)	Melting Point	No data available
рН	No data available	Specific Gravity/Relative Density	0.96 Water=1
Density	~8.01 lbs/gal	Bulk Density	No data available
Water Solubility	No data available	Solvent Solubility	No data available
Viscosity 270 Centipoise (cPs, cP) or mPas @ 140 F(60 C)			
Volatility			
Vapor Pressure	2 mmHg (torr) @ 68 F(20 C)	Vapor Density	4.9 Air=1
Evaporation Rate < 1 Ether = 1		VOC (Vol.)	< 500 g/L
Flammability			
Flash Point	105 °F(40.5 °C) CC (Closed Cup)	UEL	6 %
LEL	0.9 %	Autoignition	No data available

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	CAS	Data
Solvent naphtha (petroleum), light aromatic (1% TO 2.5%)	64742-95-6	Acute Toxicity: orl-rat LD50:8400 mg/kg
Benzene, 1,3,5-trimethyl (0.5% TO 1.5%)	108-67-8	Acute Toxicity: orl-rat LD50:5000 mg/kg; ihl-hmn TCLo:10 ppm
1,2,4-Trimethylbenzene (0.5% TO 1%)		Acute Toxicity: orl-rat LD50:5 gm/kg; ihl-rat LC50:18000 mg/m3/4H

Other

 This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Information 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.

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: Not restricted if shipped in containers <450L (119 gallons) Restricted if shipped in containers >450L (119 gallons)

TDG - Canada Transportation of Dangerous Goods: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III 1.33 Class 3, Flammable Liquids: *Not Restricted under General Exemption for small container packaging.*

IMO/IMDG –International Maritime Transport: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III 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.

State Right To Know						
Component	CAS		MA		NJ	PA
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
Solvent naphtha (petroleum), light aromatic	64742-95-6		No	No		No
Benzene, 1,3,5-trimethyl	108-67-8		Yes	No		No
1,2,4-Trimethylbenzene	95-63-6		Yes	Yes		Yes
	Inventory					
Component CAS EU EINECS TSCA					TSCA	
Mineral Spirits	8052-41-3		Yes		Yes	
Asphalt 8052-42-4			Yes		Yes	
Numinum 7429-90-5			Yes		Yes	
Solvent naphtha (petroleum), light aromatic 64742-95-6			Yes		Yes	
Benzene, 1,3,5-trimethyl	nzene, 1,3,5-trimethyl 108-67-8		Yes		Yes	
1,2,4-Trimethylbenzene	Trimethylbenzene 95-63-6		Yes			Yes

Canada

Labor

Canada - WHMIS - Classifications of			
•Asphalt	8052-42-4	30% TO 40%	Not Listed
•Aluminum	7429-90-5	20% TO 30%	B6 (powder); Uncontrolled product according to WHMIS classification criteria
 1,2,4-Trimethylbenzene 	95-63-6	0.5% TO 1%	B3
 Solvent naphtha (petroleum), light aromatic 	64742-95-6	1% TO 2.5%	B3, D2B
•Perlite	130885-09-5	5% TO 10%	D2A (ore, containing >0.1% Crystalline silica); Uncontrolled

			product according to WHINIS classification criteria (ore)
 Mineral Spirits 	8052-41-3	30% TO 45%	B3, D2B
 Benzene, 1,3,5-trimethyl 	108-67-8	0.5% TO 1.5%	B3

United States

Environment

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

•Asphalt	8052-42-4	30% TO 40%	Not Listed
•Aluminum	7429-90-5	20% TO 30%	1.0 % de minimis concentration (dust or fume only)
 1,2,4-Trimethylbenzene 	95-63-6	0.5% TO 1%	1.0 % de minimis concentration
•Solvent naphtha (petroleum), light aromatic	64742-95-6	1% TO 2.5%	Not Listed
•Perlite	130885-09-5	5% TO 10%	Not Listed
Mineral Spirits	8052-41-3	30% TO 45%	Not Listed
 Benzene, 1,3,5-trimethyl 	108-67-8	0.5% TO 1.5%	Not Listed

Section 16 - Other Information

Prepared By	 GG Inc.

Preparation Date

• 07/26/2010 • 5/27/2015

Last Revision Date Liability

Disclaimer/Statement of • 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. APOC does not accept liability for any loss or damage that may occur from the use of this information.

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