

Section 1 - Product and Company Identification

Material Name	- Fibered Asphalt Emulsion
Chemical Category	- Mixture
Product Code	- AP-3021
Chemical Category	- Roof and Foundation Coating
Product Description	- Asphalt Emulsion based roof coating that is odorless, solvent-free product designed for a wide variety of roof applications.
Product Use	- Water Based Asphalt Roof and Foundation 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
<u>Emergency</u>	- 800-424-9300 - CHEMTREC
<u>Emergency</u>	- 703-527-3887 - CHEMTREC (Outside US)
Last Revision Date	- 4/22/2015

Section 2 - Hazards Identification

Signal Word: **WARNING!**

*May be harmful if swallowed. May cause respiratory irritation. Causes eye irritation. Causes mild skin irritation.
Vapors may cause headache, nausea, and respiratory tract irritation.*

Prevention	Do not breathe dust, fume, gas, mist, vapours and/or spray. Do not handle until all safety precautions have been read and understood. Wear protective gloves, clothing, and eye/face protection.
Response	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.
Storage/Disposal	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



CAUTION - Vapors may cause headache, nausea, and respiratory tract irritation.

Physical Form	- Liquid
Color	- Black
Odor	- Mild Hydrocarbon.
Flash Point	- 460°F(238°C)
OSHA HCS2012	- Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
WHMIS	- Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A



- GHS**
- Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
- Route Of Entry**
- Inhalation, Skin, Eye, Ingestion/Oral
- Medical Conditions Aggravated by Exposure**
- Lungs, Skin/Dermal,

Potential Health Effects

Inhalation

- Acute (Immediate)** - May cause irritation.
- Chronic (Delayed)** - Prolonged inhalation of vapors without fresh air may be harmful.

Skin

- Acute (Immediate)** - May cause irritation.
- Chronic (Delayed)** - Repeated and prolonged exposure may cause dermatitis.

Eye

- Acute (Immediate)** - May cause burning and redness or swelling of the eyes. May cause irritation.
- Chronic (Delayed)** - Repeated and prolonged exposure may cause irritation.

Ingestion

- Acute (Immediate)** - May be harmful or fatal if swallowed.
- Chronic (Delayed)** - No data available

See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

Hazardous Components

Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	Classifications According to Regulation/Directive	Other
Asphalt	8052-42-4	30% TO 50%	NA1999, 232-490-9	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 EU DSD/DPD	NDA
Bentonite	1302-78-9	1% TO 8%	215-108-5		NDA	NDA
Kaolin	1332-58-7	3% TO 5%			UN GHS: Eye Irrit. 2A; STOT RE 2 EU DSD/DPD: Irritant(Xi); R36/37	NDA
Cellulose	65996-61-4	1% TO 5%	265-995-8		WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2 EU DSD/DPD:	NDA
Quartz	14808-60-7	0.1% TO 1%	238-878-4		UN GHS: Carc. 1A; STOT RE 1 EU DSD/DPD: Carcinogen 1(Carc.Cat.1); R49	NDA

Non-Hazardous Components

Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	EU R & S Phrases	Other
Water	7732-18-5	40% TO 50%	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 | - Call a physician or poison control center if you feel unwell. If not breathing, give artificial respiration. Remove subject to fresh air. |
| Skin | - Get medical attention if symptoms occur. Wash the contaminated area of body with soap and fresh water. Remove contaminated clothing and shoes. Wash clothing before reuse. |
| Eye | - Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention if symptoms of irritation continue. |
| Ingestion | - Call a physician or poison control center immediately. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting. |
| Other Information | - Have the product container or label with you when calling a poison control center or doctor, or going for treatment. |

See Section 2 for Potential Health Effects.

Section 5 - Fire Fighting Measures

- | | |
|---|--|
| Extinguishing Media | - Use CO ₂ , dry chemical, or foam. |
| Unsuitable Extinguishing Media | - Do not use halogenated extinguishing agents. |
| Firefighting Procedures | - Keep unauthorized personnel away. Stay upwind. |
| Unusual Fire and Explosion Hazards | - 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 | - 460°F(238°C) |

Section 6 - Accidental Release Measures

- | | |
|--------------------------------------|--|
| Personal Precautions | - If you have not donned special protective clothing approved for this material, do not attempt to contain the materials until proper PPE is obtained. Ventilate the area as needed. |
| Emergency Procedures | - Stop leak if you can do so 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. |
| Environmental Precautions | - Avoid run off to waterways and sewers |
| Containment/Clean-up Measures | - Use appropriate Personal Protective Equipment (PPE) Contain and recover liquid when possible. Contain and/or absorb spill with inert material (e.g. sand, vermiculite, and then place in suitable container. Do not use water to flush spill area. |
| Prohibited Materials | - Avoid contact with strong oxidizing agents |

Section 7 - Handling and Storage

- | | |
|---|--|
| Handling | - Keep containers tightly closed when not in use. Use only with adequate ventilation. Keep away from heat and ignition sources. |
| Storage | - Keep only in the original container/package in a cool well-ventilated place. Keep away from fire. Keep container closed when not in use. |
| Incompatible Materials or Ignition Sources | - Avoid contact with strong oxidizing agents and acids. |

Section 8 - Exposure Controls/Personal Protection

Personal Protective Equipment Pictograms



Respiratory

- When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator. 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.
- Wear ANSI approved safety glasses with side shields or safety goggles.
- Wear chemical protective gloves made of Nitrile or Neoprene.
- Wear clothing that covers the skin to prevent skin exposure.
- Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke during work. Wash hands before eating.
- Use precaution to protect building intake from fumes and vapors created outdoors.
- Refer to listed exposure limits in state information of this section.

Eye/Face

Hands

Skin/Body

General Industrial Hygiene Considerations

Engineering

Measures/Controls

Exposure Limits/Guidelines

Exposure Limits/Guidelines

	Result	Canada Ontario	Mexico	OSHA	United States - California
Quartz (14808-60-7)	TWAs	0.10 mg/m ³ TWAEV (designated substance regulation)	0.1 mg/m ³ TWA (respirable fraction)	Not established	0.3 mg/m ³ PEL (total dust); 0.1 mg/m ³ PEL (respirable dust)
Kaolin (1332-58-7)	TWAs	2 mg/m ³ TWAEV (containing no asbestos and less than 1% crystalline silica, respirable)	10 mg/m ³ TWA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	2 mg/m ³ PEL (respirable dust, containing no asbestos fibers, < 1% crystalline silica)
Asphalt (8052-42-4)	TWAs	0.5 mg/m ³ TWAEV (fume, inhalable, as benzene-soluble aerosol)	5 mg/m ³ TWA	Not established	5 mg/m ³ PEL (fume)

Exposure Control Notations

ACGIH

- Kaolin (1332-58-7):Carcinogens:A4 - Not Classifiable as a Human Carcinogen
- Asphalt (8052-42-4):Carcinogens:A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
- Quartz (14808-60-7):Carcinogens:A2 - Suspected Human Carcinogen

Section 9 - Physical and Chemical Properties

Physical Form

- Liquid

Appearance/Description

- Thick black semi-liquid.

Color: Black	Odor: Mild Hydrocarbon.
Taste: No data available.	Odor Threshold: NDA
Boiling Point: 212 F(100 C)	Vapor Pressure: NDA
Melting Point: NDA	Vapor Density: = 1 Air=1
Specific Gravity/Relative Density: = 1.038 Water=1	Evaporation Rate: = 1 Water = 1
Density: = 8.6 lbs/gal	VOC (Wt.): NDA
Bulk Density: NDA	VOC (Vol.): < 10 g/L

pH:	NDA	Volatiles (Wt.):	NDA
Water Solubility:	NDA	Volatiles (Vol.):	NDA
Solvent Solubility:	NDA	Flash Point:	460 F(237.7778 C)
Viscosity:	NDA	Flash Point Test Type:	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 acids.
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 50%	8052-42-4	Acute Toxicity: ; orl-rat LD50:>5000 mg/kg; ihl-rat LC50:>94.4 mg/m3; ihl-hmn TDLo:10 mg/m3/5.5Y-I Tumorigen/Carcinogen: ; skn-mus TDLo:905 gm/kg/2Y-I
Bentonite	1% TO 8%	1302-78-9	Acute Toxicity: ; orl-rat TDLo:700 mg/kg/7D-I
Kaolin	3% TO 5%	1332-58-7	Acute Toxicity: ; orl-rat TDLo:370 gm/kg/37D-I
Quartz	0.1% TO 1%	14808-60-7	Acute Toxicity: ; orl-rat TDLo:120 gm/kg

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 in accordance with applicable federal, state, and local government regulations. Do not allow into any sewer on the ground, or into any body of water.
----------------	---

Section 14 - Transportation Information

DOT - United States - Department of Transportation

Shipping Name: Not Restricted

TDG - Canada - Transport of Dangerous Goods

Shipping Name: Not Restricted

IMO/IMDG –International Maritime Transport

Shipping Name: Not Restricted

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
Bentonite	1302-78-9	No	No	No	No
Kaolin	1332-58-7	Yes	Yes	Yes	Yes
Cellulose	65996-61-4	No	No	No	No
Quartz	14808-60-7	Yes	Yes	Yes	Yes

Inventory

Component	CAS	EU EINECS	TSCA
Water	7732-18-5	Yes	Yes
Asphalt	8052-42-4	Yes	Yes
Bentonite	1302-78-9	Yes	Yes
Kaolin	1332-58-7	Yes	Yes
Cellulose	65996-61-4	Yes	Yes
Quartz	14808-60-7	Yes	Yes

Canada - WHMIS - Classifications of Substances

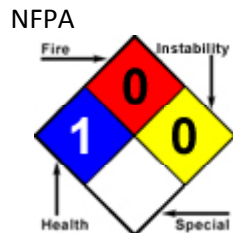
▪ Kaolin	1332-58-7	3% TO 5%	D2A
▪ Asphalt	8052-42-4	30% TO 50%	Not Listed
▪ Quartz	14808-60-7	0.1% TO 1%	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS website.)
▪ Bentonite	1302-78-9	1% TO 8%	D2A
▪ Water	7732-18-5	40% TO 50%	Uncontrolled product according to WHMIS classification criteria
▪ Cellulose	65996-61-4	1% TO 5%	Not Listed

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

▪ Kaolin	1332-58-7	3% TO 5%	Not Listed
▪ Asphalt	8052-42-4	30% TO 50%	Not Listed
▪ Quartz	14808-60-7	0.1% TO 1%	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
▪ Bentonite	1302-78-9	1% TO 8%	Not Listed
▪ Water	7732-18-5	40% TO 50%	Not Listed
▪ Cellulose	65996-61-4	1% TO 5%	Not Listed

Section 16 - Other Information

- Last Revision Date** - 4/22/2015
- 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. APOC does not accept liability for any loss or damage that may occur from the use of this information.



Section 1 - Product and Company Identification

Material Name	- Fibered Asphalt Emulsion
Chemical Category	- Mixture
Product Code	- AP-3023
Chemical Category	- Roof and Foundation Coating
Product Description	- Asphalt Emulsion based roof coating that is odorless, solvent-free product designed for a wide variety of roof applications.
Product Use	- Water Based Asphalt Roof and Foundation 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
<u>Emergency</u>	- 800-424-9300 - CHEMTREC
<u>Emergency</u>	- 703-527-3887 - CHEMTREC (Outside US)
Last Revision Date	- 4/22/2015

Section 2 - Hazards Identification

Signal Word: **WARNING!**

*May be harmful if swallowed. May cause respiratory irritation. Causes eye irritation. Causes mild skin irritation.
Vapors may cause headache, nausea, and respiratory tract irritation.*

Prevention	Do not breathe dust, fume, gas, mist, vapours and/or spray. Do not handle until all safety precautions have been read and understood. Wear protective gloves, clothing, and eye/face protection.
Response	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.
Storage/Disposal	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



CAUTION - Vapors may cause headache, nausea, and respiratory tract irritation.

Physical Form	- Liquid
Color	- Black
Odor	- Mild Hydrocarbon.
Flash Point	- 460°F(238°C)
OSHA HCS2012	- Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
WHMIS	- Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A



- GHS**
- Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
- Route Of Entry**
- Inhalation, Skin, Eye, Ingestion/Oral
- Medical Conditions Aggravated by Exposure**
- Lungs, Skin/Dermal,

Potential Health Effects

Inhalation

- Acute (Immediate)** - May cause irritation.
- Chronic (Delayed)** - Prolonged inhalation of vapors without fresh air may be harmful.

Skin

- Acute (Immediate)** - May cause irritation.
- Chronic (Delayed)** - Repeated and prolonged exposure may cause dermatitis.

Eye

- Acute (Immediate)** - May cause burning and redness or swelling of the eyes. May cause irritation.
- Chronic (Delayed)** - Repeated and prolonged exposure may cause irritation.

Ingestion

- Acute (Immediate)** - May be harmful or fatal if swallowed.
- Chronic (Delayed)** - No data available

See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

Hazardous Components

Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	Classifications According to Regulation/Directive	Other
Asphalt	8052-42-4	30% TO 50%	NA1999, 232-490-9	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 EU DSD/DPD	NDA
Bentonite	1302-78-9	1% TO 8%	215-108-5		NDA	NDA
Kaolin	1332-58-7	3% TO 5%			UN GHS: Eye Irrit. 2A; STOT RE 2 EU DSD/DPD: Irritant(Xi); R36/37	NDA
Cellulose	65996-61-4	1% TO 5%	265-995-8		WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2 EU DSD/DPD:	NDA
Quartz	14808-60-7	0.1% TO 1%	238-878-4		UN GHS: Carc. 1A; STOT RE 1 EU DSD/DPD: Carcinogen 1(Carc.Cat.1); R49	NDA

Non-Hazardous Components

Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	EU R & S Phrases	Other
Water	7732-18-5	40% TO 50%	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 | - Call a physician or poison control center if you feel unwell. If not breathing, give artificial respiration. Remove subject to fresh air. |
| Skin | - Get medical attention if symptoms occur. Wash the contaminated area of body with soap and fresh water. Remove contaminated clothing and shoes. Wash clothing before reuse. |
| Eye | - Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention if symptoms of irritation continue. |
| Ingestion | - Call a physician or poison control center immediately. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting. |
| Other Information | - Have the product container or label with you when calling a poison control center or doctor, or going for treatment. |

See Section 2 for Potential Health Effects.

Section 5 - Fire Fighting Measures

- | | |
|---|--|
| Extinguishing Media | - Use CO ₂ , dry chemical, or foam. |
| Unsuitable Extinguishing Media | - Do not use halogenated extinguishing agents. |
| Firefighting Procedures | - Keep unauthorized personnel away. Stay upwind. |
| Unusual Fire and Explosion Hazards | - 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 | - 460°F(238°C) |

Section 6 - Accidental Release Measures

- | | |
|--------------------------------------|--|
| Personal Precautions | - If you have not donned special protective clothing approved for this material, do not attempt to contain the materials until proper PPE is obtained. Ventilate the area as needed. |
| Emergency Procedures | - Stop leak if you can do so 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. |
| Environmental Precautions | - Avoid run off to waterways and sewers |
| Containment/Clean-up Measures | - Use appropriate Personal Protective Equipment (PPE) Contain and recover liquid when possible. Contain and/or absorb spill with inert material (e.g. sand, vermiculite, and then place in suitable container. Do not use water to flush spill area. |
| Prohibited Materials | - Avoid contact with strong oxidizing agents |

Section 7 - Handling and Storage

- | | |
|---|--|
| Handling | - Keep containers tightly closed when not in use. Use only with adequate ventilation. Keep away from heat and ignition sources. |
| Storage | - Keep only in the original container/package in a cool well-ventilated place. Keep away from fire. Keep container closed when not in use. |
| Incompatible Materials or Ignition Sources | - Avoid contact with strong oxidizing agents and acids. |

Section 8 - Exposure Controls/Personal Protection

Personal Protective Equipment Pictograms



Respiratory

- When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator. 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.
- Wear ANSI approved safety glasses with side shields or safety goggles.
- Wear chemical protective gloves made of Nitrile or Neoprene.
- Wear clothing that covers the skin to prevent skin exposure.
- Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke during work. Wash hands before eating.
- Use precaution to protect building intake from fumes and vapors created outdoors.
- Refer to listed exposure limits in state information of this section.

Eye/Face

Hands

Skin/Body

General Industrial Hygiene Considerations

Engineering

Measures/Controls

Exposure Limits/Guidelines

Exposure Limits/Guidelines

	Result	Canada Ontario	Mexico	OSHA	United States - California
Quartz (14808-60-7)	TWAs	0.10 mg/m ³ TWAEV (designated substance regulation)	0.1 mg/m ³ TWA (respirable fraction)	Not established	0.3 mg/m ³ PEL (total dust); 0.1 mg/m ³ PEL (respirable dust)
Kaolin (1332-58-7)	TWAs	2 mg/m ³ TWAEV (containing no asbestos and less than 1% crystalline silica, respirable)	10 mg/m ³ TWA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	2 mg/m ³ PEL (respirable dust, containing no asbestos fibers, < 1% crystalline silica)
Asphalt (8052-42-4)	TWAs	0.5 mg/m ³ TWAEV (fume, inhalable, as benzene-soluble aerosol)	5 mg/m ³ TWA	Not established	5 mg/m ³ PEL (fume)

Exposure Control Notations

ACGIH

- Kaolin (1332-58-7):Carcinogens:A4 - Not Classifiable as a Human Carcinogen
- Asphalt (8052-42-4):Carcinogens:A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
- Quartz (14808-60-7):Carcinogens:A2 - Suspected Human Carcinogen

Section 9 - Physical and Chemical Properties

Physical Form

- Liquid

Appearance/Description

- Thick black semi-liquid.

Color: Black	Odor: Mild Hydrocarbon.
Taste: No data available.	Odor Threshold: NDA
Boiling Point: 212 F(100 C)	Vapor Pressure: NDA
Melting Point: NDA	Vapor Density: = 1 Air=1
Specific Gravity/Relative Density: = 1.038 Water=1	Evaporation Rate: = 1 Water = 1
Density: = 8.6 lbs/gal	VOC (Wt.): NDA
Bulk Density: NDA	VOC (Vol.): < 10 g/L

pH:	NDA	Volatiles (Wt.):	NDA
Water Solubility:	NDA	Volatiles (Vol.):	NDA
Solvent Solubility:	NDA	Flash Point:	460 F(237.7778 C)
Viscosity:	NDA	Flash Point Test Type:	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 acids.
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 50%	8052-42-4	Acute Toxicity: ; orl-rat LD50:>5000 mg/kg; ihl-rat LC50:>94.4 mg/m3; ihl-hmn TDLo:10 mg/m3/5.5Y-I Tumorigen/Carcinogen: ; skn-mus TDLo:905 gm/kg/2Y-I
Bentonite	1% TO 8%	1302-78-9	Acute Toxicity: ; orl-rat TDLo:700 mg/kg/7D-I
Kaolin	3% TO 5%	1332-58-7	Acute Toxicity: ; orl-rat TDLo:370 gm/kg/37D-I
Quartz	0.1% TO 1%	14808-60-7	Acute Toxicity: ; orl-rat TDLo:120 gm/kg

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 in accordance with applicable federal, state, and local government regulations. Do not allow into any sewer on the ground, or into any body of water.
----------------	---

Section 14 - Transportation Information

DOT - United States - Department of Transportation

Shipping Name: Not Restricted

TDG - Canada - Transport of Dangerous Goods

Shipping Name: Not Restricted

IMO/IMDG –International Maritime Transport

Shipping Name: Not Restricted

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
Bentonite	1302-78-9	No	No	No	No
Kaolin	1332-58-7	Yes	Yes	Yes	Yes
Cellulose	65996-61-4	No	No	No	No
Quartz	14808-60-7	Yes	Yes	Yes	Yes

Inventory

Component	CAS	EU EINECS	TSCA
Water	7732-18-5	Yes	Yes
Asphalt	8052-42-4	Yes	Yes
Bentonite	1302-78-9	Yes	Yes
Kaolin	1332-58-7	Yes	Yes
Cellulose	65996-61-4	Yes	Yes
Quartz	14808-60-7	Yes	Yes

Canada - WHMIS - Classifications of Substances

▪ Kaolin	1332-58-7	3% TO 5%	D2A
▪ Asphalt	8052-42-4	30% TO 50%	Not Listed
▪ Quartz	14808-60-7	0.1% TO 1%	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS website.)
▪ Bentonite	1302-78-9	1% TO 8%	D2A
▪ Water	7732-18-5	40% TO 50%	Uncontrolled product according to WHMIS classification criteria
▪ Cellulose	65996-61-4	1% TO 5%	Not Listed

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

▪ Kaolin	1332-58-7	3% TO 5%	Not Listed
▪ Asphalt	8052-42-4	30% TO 50%	Not Listed
▪ Quartz	14808-60-7	0.1% TO 1%	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
▪ Bentonite	1302-78-9	1% TO 8%	Not Listed
▪ Water	7732-18-5	40% TO 50%	Not Listed
▪ Cellulose	65996-61-4	1% TO 5%	Not Listed

Section 16 - Other Information

- Last Revision Date** - 4/22/2015
- 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. APOC does not accept liability for any loss or damage that may occur from the use of this information.



Section 1 - Product and Company Identification

Material Name	- Fibered Asphalt Emulsion
Chemical Category	- Mixture
Product Code	- AP-3025
Chemical Category	- Roof and Foundation Coating
Product Description	- Asphalt Emulsion based roof coating that is odorless, solvent-free product designed for a wide variety of roof applications.
Product Use	- Water Based Asphalt Roof and Foundation 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
<u>Emergency</u>	- 800-424-9300 - CHEMTREC
<u>Emergency</u>	- 703-527-3887 - CHEMTREC (Outside US)
Last Revision Date	- 4/22/2015

Section 2 - Hazards Identification

Signal Word: **WARNING!**

*May be harmful if swallowed. May cause respiratory irritation. Causes eye irritation. Causes mild skin irritation.
Vapors may cause headache, nausea, and respiratory tract irritation.*

Prevention	Do not breathe dust, fume, gas, mist, vapours and/or spray. Do not handle until all safety precautions have been read and understood. Wear protective gloves, clothing, and eye/face protection.
Response	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.
Storage/Disposal	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



CAUTION - Vapors may cause headache, nausea, and respiratory tract irritation.

Physical Form	- Liquid
Color	- Black
Odor	- Mild Hydrocarbon.
Flash Point	- 460°F(238°C)
OSHA HCS2012	- Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
WHMIS	- Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A



- GHS**
- Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
- Route Of Entry**
- Inhalation, Skin, Eye, Ingestion/Oral
- Medical Conditions Aggravated by Exposure**
- Lungs, Skin/Dermal,

Potential Health Effects

Inhalation

- Acute (Immediate)** - May cause irritation.
- Chronic (Delayed)** - Prolonged inhalation of vapors without fresh air may be harmful.

Skin

- Acute (Immediate)** - May cause irritation.
- Chronic (Delayed)** - Repeated and prolonged exposure may cause dermatitis.

Eye

- Acute (Immediate)** - May cause burning and redness or swelling of the eyes. May cause irritation.
- Chronic (Delayed)** - Repeated and prolonged exposure may cause irritation.

Ingestion

- Acute (Immediate)** - May be harmful or fatal if swallowed.
- Chronic (Delayed)** - No data available

See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

Hazardous Components

Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	Classifications According to Regulation/Directive	Other
Asphalt	8052-42-4	30% TO 50%	NA1999, 232-490-9	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 EU DSD/DPD	NDA
Bentonite	1302-78-9	1% TO 8%	215-108-5		NDA	NDA
Kaolin	1332-58-7	3% TO 5%			UN GHS: Eye Irrit. 2A; STOT RE 2 EU DSD/DPD: Irritant(Xi); R36/37	NDA
Cellulose	65996-61-4	1% TO 5%	265-995-8		WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2 EU DSD/DPD:	NDA
Quartz	14808-60-7	0.1% TO 1%	238-878-4		UN GHS: Carc. 1A; STOT RE 1 EU DSD/DPD: Carcinogen 1(Carc.Cat.1); R49	NDA

Non-Hazardous Components

Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	EU R & S Phrases	Other
Water	7732-18-5	40% TO 50%	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 | - Call a physician or poison control center if you feel unwell. If not breathing, give artificial respiration. Remove subject to fresh air. |
| Skin | - Get medical attention if symptoms occur. Wash the contaminated area of body with soap and fresh water. Remove contaminated clothing and shoes. Wash clothing before reuse. |
| Eye | - Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention if symptoms of irritation continue. |
| Ingestion | - Call a physician or poison control center immediately. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting. |
| Other Information | - Have the product container or label with you when calling a poison control center or doctor, or going for treatment. |

See Section 2 for Potential Health Effects.

Section 5 - Fire Fighting Measures

- | | |
|---|--|
| Extinguishing Media | - Use CO ₂ , dry chemical, or foam. |
| Unsuitable Extinguishing Media | - Do not use halogenated extinguishing agents. |
| Firefighting Procedures | - Keep unauthorized personnel away. Stay upwind. |
| Unusual Fire and Explosion Hazards | - 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 | - 460°F(238°C) |

Section 6 - Accidental Release Measures

- | | |
|--------------------------------------|--|
| Personal Precautions | - If you have not donned special protective clothing approved for this material, do not attempt to contain the materials until proper PPE is obtained. Ventilate the area as needed. |
| Emergency Procedures | - Stop leak if you can do so 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. |
| Environmental Precautions | - Avoid run off to waterways and sewers |
| Containment/Clean-up Measures | - Use appropriate Personal Protective Equipment (PPE) Contain and recover liquid when possible. Contain and/or absorb spill with inert material (e.g. sand, vermiculite, and then place in suitable container. Do not use water to flush spill area. |
| Prohibited Materials | - Avoid contact with strong oxidizing agents |

Section 7 - Handling and Storage

- | | |
|---|--|
| Handling | - Keep containers tightly closed when not in use. Use only with adequate ventilation. Keep away from heat and ignition sources. |
| Storage | - Keep only in the original container/package in a cool well-ventilated place. Keep away from fire. Keep container closed when not in use. |
| Incompatible Materials or Ignition Sources | - Avoid contact with strong oxidizing agents and acids. |

Section 8 - Exposure Controls/Personal Protection

Personal Protective Equipment Pictograms



Respiratory

- When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator. 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.
- Wear ANSI approved safety glasses with side shields or safety goggles.
- Wear chemical protective gloves made of Nitrile or Neoprene.
- Wear clothing that covers the skin to prevent skin exposure.
- Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke during work. Wash hands before eating.
- Use precaution to protect building intake from fumes and vapors created outdoors.
- Refer to listed exposure limits in state information of this section.

Eye/Face

Hands

Skin/Body

General Industrial Hygiene Considerations

Engineering

Measures/Controls

Exposure Limits/Guidelines

Exposure Limits/Guidelines

	Result	Canada Ontario	Mexico	OSHA	United States - California
Quartz (14808-60-7)	TWAs	0.10 mg/m ³ TWAEV (designated substance regulation)	0.1 mg/m ³ TWA (respirable fraction)	Not established	0.3 mg/m ³ PEL (total dust); 0.1 mg/m ³ PEL (respirable dust)
Kaolin (1332-58-7)	TWAs	2 mg/m ³ TWAEV (containing no asbestos and less than 1% crystalline silica, respirable)	10 mg/m ³ TWA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	2 mg/m ³ PEL (respirable dust, containing no asbestos fibers, < 1% crystalline silica)
Asphalt (8052-42-4)	TWAs	0.5 mg/m ³ TWAEV (fume, inhalable, as benzene-soluble aerosol)	5 mg/m ³ TWA	Not established	5 mg/m ³ PEL (fume)

Exposure Control Notations

ACGIH

- Kaolin (1332-58-7):Carcinogens:A4 - Not Classifiable as a Human Carcinogen
- Asphalt (8052-42-4):Carcinogens:A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
- Quartz (14808-60-7):Carcinogens:A2 - Suspected Human Carcinogen

Section 9 - Physical and Chemical Properties

Physical Form

- Liquid

Appearance/Description

- Thick black semi-liquid.

Color: Black		Odor: Mild Hydrocarbon.	
Taste: No data available.		Odor Threshold: NDA	
Boiling Point:	212 F(100 C)	Vapor Pressure:	NDA
Melting Point:	NDA	Vapor Density:	= 1 Air=1
Specific Gravity/Relative Density:	= 1.038 Water=1	Evaporation Rate:	= 1 Water = 1
Density:	= 8.6 lbs/gal	VOC (Wt.):	NDA
Bulk Density:	NDA	VOC (Vol.):	< 10 g/L

pH:	NDA	Volatiles (Wt.):	NDA
Water Solubility:	NDA	Volatiles (Vol.):	NDA
Solvent Solubility:	NDA	Flash Point:	460 F(237.7778 C)
Viscosity:	NDA	Flash Point Test Type:	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 acids.
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 50%	8052-42-4	Acute Toxicity: ; orl-rat LD50:>5000 mg/kg; ihl-rat LC50:>94.4 mg/m3; ihl-hmn TDLo:10 mg/m3/5.5Y-I Tumorigen/Carcinogen: ; skn-mus TDLo:905 gm/kg/2Y-I
Bentonite	1% TO 8%	1302-78-9	Acute Toxicity: ; orl-rat TDLo:700 mg/kg/7D-I
Kaolin	3% TO 5%	1332-58-7	Acute Toxicity: ; orl-rat TDLo:370 gm/kg/37D-I
Quartz	0.1% TO 1%	14808-60-7	Acute Toxicity: ; orl-rat TDLo:120 gm/kg

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 in accordance with applicable federal, state, and local government regulations. Do not allow into any sewer on the ground, or into any body of water.
----------------	---

Section 14 - Transportation Information

DOT - United States - Department of Transportation

Shipping Name: Not Restricted

TDG - Canada - Transport of Dangerous Goods

Shipping Name: Not Restricted

IMO/IMDG –International Maritime Transport

Shipping Name: Not Restricted

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
Bentonite	1302-78-9	No	No	No	No
Kaolin	1332-58-7	Yes	Yes	Yes	Yes
Cellulose	65996-61-4	No	No	No	No
Quartz	14808-60-7	Yes	Yes	Yes	Yes

Inventory

Component	CAS	EU EINECS	TSCA
Water	7732-18-5	Yes	Yes
Asphalt	8052-42-4	Yes	Yes
Bentonite	1302-78-9	Yes	Yes
Kaolin	1332-58-7	Yes	Yes
Cellulose	65996-61-4	Yes	Yes
Quartz	14808-60-7	Yes	Yes

Canada - WHMIS - Classifications of Substances

▪ Kaolin	1332-58-7	3% TO 5%	D2A
▪ Asphalt	8052-42-4	30% TO 50%	Not Listed
▪ Quartz	14808-60-7	0.1% TO 1%	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS website.)
▪ Bentonite	1302-78-9	1% TO 8%	D2A
▪ Water	7732-18-5	40% TO 50%	Uncontrolled product according to WHMIS classification criteria
▪ Cellulose	65996-61-4	1% TO 5%	Not Listed

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

▪ Kaolin	1332-58-7	3% TO 5%	Not Listed
▪ Asphalt	8052-42-4	30% TO 50%	Not Listed
▪ Quartz	14808-60-7	0.1% TO 1%	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
▪ Bentonite	1302-78-9	1% TO 8%	Not Listed
▪ Water	7732-18-5	40% TO 50%	Not Listed
▪ Cellulose	65996-61-4	1% TO 5%	Not Listed

Section 16 - Other Information

- Last Revision Date** - 4/22/2015
- 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. APOC does not accept liability for any loss or damage that may occur from the use of this information.

