

Safety Data Sheet

Firestone Building Products Company

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name • APP Polyester Series: APP 160, APP 160 COOL, APP 170, APP 170 COOL, APP 180, APP 180 COOL, APP 180P

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) • Construction

1.3 Details of the supplier of the safety data sheet

Manufacturer • Firestone Building Products Company
200 4th Avenue S
Nashville, TN 37201-2208
United States

firestonemsds@bfdp.com

Telephone (General) • 800-428-4442

1.4 Emergency telephone number

Manufacturer • (800) 424-9300 - CHEMTREC

Manufacturer • (703) 527-3887 - CHEMTREC - International

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Specific Target Organ Toxicity Repeated Exposure 1 - H372

DSD/DPD • Harmful (Xn)
R48/20

2.2 Label Elements

CLP

DANGER



Hazard statements • H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention • P260 - Do not breathe dust, fume, gas, mist, vapours and/or spray.
P264 - Wash thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.

Response • P314 - Get medical advice/attention if you feel unwell.

- Storage/Disposal** • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD

- Risk phrases** • R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.

2.3 Other Hazards

- CLP**
- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.
- DSD/DPD**
- According to European Directive 1999/45/EC this material is considered dangerous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012**
- Specific Target Organ Toxicity Repeated Exposure 1

2.2 Label elements

OSHA HCS 2012

DANGER

- Hazard statements** • Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention** • Do not breathe dust, fume, gas, mist, vapours and/or spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
- Response** • Get medical advice/attention if you feel unwell.
- Storage/Disposal** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

- OSHA HCS 2012**
- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

- WHMIS**
- Other Toxic Effects - D2B

2.2 Label elements

WHMIS



WHMIS

- Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients**3.1 Substances**

- Material does not meet the criteria of a substance.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Asphalt	CAS:8052-42-4 EINECS:232-490-9	40% TO 60%	Ingestion/Oral-Rat LD50 • >5000 mg/kg Inhalation-Rat LC50 • >94.4 mg/m ³	EU DSD/DPD: Skin Irrit. 2, H315 EU CLP: Xi R38 OSHA HCS 2012: Skin Irrit. 2	NDA
Limestone	CAS:1317-65-3 EC Number:215- 279-6	< 25%	NDA	EU DSD/DPD: Xn; R48/20 EU CLP: STOT RE 1 (Lung, Inhl), H372 OSHA HCS 2012: STOT RE 1 (Lungs, Inhl)	NDA
Quartz	CAS:14808-60-7 EC Number:238- 878-4	< 10%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA

See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures**4.1 Description of first aid measures****Inhalation**

- Remove to fresh air, apply artificial respiration and/or oxygen if necessary and get medical attention.

Skin

- Remove contaminated clothing and wash exposed skin with soap and water. If irritation develops or persists, seek medical attention.

Eye

- If foreign matter enters eyes, immediately flush with large amounts of water for at least 15 minutes or until irritation subsides. If irritation develops, or persists, seek medical attention.

Ingestion

- Consult a physician if unusual reaction is noted. Product is not intended nor is it likely to be ingested or eaten.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed**Notes to Physician**

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • Use water, foam, CO₂ or dry chemical extinguishers to contain fire.

Unsuitable Extinguishing Media • No data available.

Firefighting Procedures • Fire fighters should avoid inhaling any combustion products.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • Burning of this product will produce thick black smoke.

Hazardous Combustion Products • Carbon dioxide, carbon monoxide and partially burned carbon.

5.3 Advice for firefighters

- Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing to avoid smoke inhalation and lack of oxygen.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions • No special precautions expected to be necessary if material is used under ordinary conditions and as recommended.

Emergency Procedures • No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended.

6.2 Environmental precautions

- Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures • Pick up large pieces. Vacuum dust. If sweeping is necessary, use a dust suppressant such as water. These procedures will help to minimize potential exposures. Scoop up material and put into a suitable container for disposal as a non-hazardous waste.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling • Avoid breathing dusts or fumes generated from cutting or heating this material. Use this product with adequate ventilation. Always wash work clothes separately from other clothing. Wash thoroughly after handling. Use personal protective equipment as described in Section 8.

7.2 Conditions for safe storage, including any incompatibilities

Storage • Store indoors in a cool, dry, well-ventilated area. Do not handle or store near an open flame, heat or other sources of ignition.

Special Packaging Materials • No data available.

Incompatible Materials or Ignition Sources • This product will react with strong oxidizing agents, reducing agents, strong acids and alkalis.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Australia	Belgium	Canada Alberta	Canada British Columbia
Quartz (14808-60-7)	TWAs	0.025 mg/m ³ TWA (respirable fraction)	0.1 mg/m ³ TWA (respirable dust)	0.1 mg/m ³ TWA (alveolar dust)	0.025 mg/m ³ TWA (respirable particulate)	0.025 mg/m ³ TWA (respirable)
Limestone (1317-65-3)	TWAs	Not established	Not established	10 mg/m ³ TWA	10 mg/m ³ TWA	10 mg/m ³ TWA (total dust); 3 mg/m ³ TWA (respirable fraction)
	STELs	Not established	Not established	Not established	Not established	20 mg/m ³ STEL (total dust)
Asphalt (8052-42-4)	TWAs	0.5 mg/m ³ TWA (fume, inhalable fraction, as benzene soluble aerosol)	5 mg/m ³ TWA (fume)	5 mg/m ³ TWA (fume)	5 mg/m ³ TWA (Petroleum; Bitumen, fume)	0.5 mg/m ³ TWA (inhalable fume, as Benzene-soluble aerosol)
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut
Quartz (14808-60-7)	TWAs	0.025 mg/m ³ TWA (respirable fraction)	0.1 mg/m ³ TWA (respirable fraction)	0.1 mg/m ³ TWA (respirable mass); 0.3 mg/m ³ TWA (total mass)	0.025 mg/m ³ TWA (respirable fraction)	0.1 mg/m ³ TWA (respirable mass); 0.3 mg/m ³ TWA (total mass)
Limestone (1317-65-3)	TWAs	Not established	10 mg/m ³ TWA (particulate matter containing no Asbestos and <1% Crystalline silica)	5 mg/m ³ TWA (respirable mass); 10 mg/m ³ TWA (total mass)	Not established	5 mg/m ³ TWA (respirable mass); 10 mg/m ³ TWA (total mass)
Asphalt (8052-42-4)	TWAs	0.5 mg/m ³ TWA (fume, inhalable fraction, as Benzene soluble aerosol)	5 mg/m ³ TWA (petroleum fumes)	5 mg/m ³ TWA (Petroleum fumes)	0.5 mg/m ³ TWA (fume, inhalable fraction, as Benzene soluble aerosol)	5 mg/m ³ TWA (Petroleum fumes)
	STELs	Not established	Not established	10 mg/m ³ STEL (Petroleum fumes)	Not established	10 mg/m ³ STEL (Petroleum fumes)
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Ontario	Canada Quebec	Canada Saskatchewan	Canada Yukon	China
	STELs	Not established	Not established	Not established	Not established	2 mg/m ³ STEL (containing 10-50% free SiO ₂ , total dust); 1.4 mg/m ³ STEL (containing 50-80% free SiO ₂ , total dust); 1 mg/m ³ STEL (containing >80% free SiO ₂ , total dust); 1.4 mg/m ³ STEL (containing 10-50% free SiO ₂ , respirable dust); 0.6 mg/m ³ STEL (containing 50-80% free SiO ₂ , respirable dust); 0.4 mg/m ³ STEL (containing >80%

Quartz (14808-60-7)						free SiO ₂ , respirable dust)
	TWAs	0.10 mg/m ³ TWA (designated substances regulation, respirable, listed under Silica, crystalline)	0.1 mg/m ³ TWAEV (respirable dust)	0.05 mg/m ³ TWA (respirable fraction, listed under Silica - crystalline)	300 particle/mL TWA (listed under Silica)	0.7 mg/m ³ TWA (containing 50-80% free SiO ₂ , total dust); 0.3 mg/m ³ TWA (containing 50-80% free SiO ₂ , respirable dust); 1 mg/m ³ TWA (containing 10-50% free SiO ₂ , total dust); 0.7 mg/m ³ TWA (containing 10-50% free SiO ₂ , respirable dust); 0.5 mg/m ³ TWA (containing >80% free SiO ₂ , total dust); 0.2 mg/m ³ TWA (containing >80% free SiO ₂ , respirable dust)
Limestone (1317-65-3)	STELs	Not established	Not established	Not established	20 mg/m ³ STEL	16 mg/m ³ STEL (total dust); 8 mg/m ³ STEL (respirable dust)
	TWAs	Not established	10 mg/m ³ TWAEV (Limestone, containing no Asbestos and <1% Crystalline silica, total dust)	10 mg/m ³ TWA	30 mppcf TWA; 10 mg/m ³ TWA	8 mg/m ³ TWA (total dust); 4 mg/m ³ TWA (respirable dust)
Asphalt (8052-42-4)	STELs	Not established	Not established	Not established	10 mg/m ³ STEL (fume)	12.5 mg/m ³ STEL (fume, as Benzene soluble matter)
	TWAs	0.5 mg/m ³ TWA (fume, inhalable, as Benzene-soluble aerosol)	5 mg/m ³ TWAEV (fume)	0.5 mg/m ³ TWA (fume and inhalable fraction, as Benzene soluble aerosol)	5 mg/m ³ TWA (fume)	5 mg/m ³ TWA (fume, as Benzene soluble matter)

Exposure Limits/Guidelines (Con't.)

	Result	Denmark	NIOSH	OSHA
Quartz (14808-60-7)	TWAs	0.3 mg/m ³ TWA (total); 0.1 mg/m ³ TWA (respirable)	0.05 mg/m ³ TWA (respirable dust)	Not established
Limestone (1317-65-3)	TWAs	Not established	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Asphalt (8052-42-4)	TWAs	1 mg/m ³ TWA (Cyclohexane fraction of total dust, fume)	Not established	Not established
	Ceilings	Not established	5 mg/m ³ Ceiling (fume, 15 min)	Not established

Exposure Control Notations

Canada Ontario

•Quartz (14808-60-7): **Designated Substances:** (0.10 mg/m³ TWA (respirable fraction, listed under Silica, crystalline))

Canada Quebec

•Quartz (14808-60-7): **Carcinogens:** (C2 carcinogen - effect suspected in humans)

ACGIH

•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)

Germany DFG

- Asphalt (8052-42-4): **Carcinogens:** (Category 2 (considered to be carcinogenic for man, aerosol and vapour)) | **Skin:** (skin notation (aerosol and vapour))
- Quartz (14808-60-7): **Carcinogens:** (Category 1 (causes cancer in man, alveola fraction))

Exposure Limits Supplemental

OSHA

- Quartz (14808-60-7): **Mineral Dusts:** ((30)/(SiO₂ + 2) mg/m³ TWA, total dust; (250)/(SiO₂ + 5) mppcf TWA, respirable fraction; (10)/(SiO₂ + 2) mg/m³ TWA, respirable fraction)

ACGIH

- Asphalt (8052-42-4): **BEIs:** (Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)) |

TLV Basis - Critical Effects: (eye and upper respiratory tract irritation (fume))

- Quartz (14808-60-7): **TLV Basis - Critical Effects:** (lung cancer; pulmonary fibrosis)

8.2 Exposure controls

Engineering Measures/Controls

- This material is designed to be used outdoors, in roofing applications. Good general ventilation should suffice. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment

Respiratory

- Respiratory protection is not normally required. Use a NIOSH certified respirator when the exposure limits are exceeded. Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

Eye/Face

- Safety glasses with side shields should be worn at a minimum.

Hands

- Leather or cotton gloves may be worn to prevent skin contact and irritation.

Skin/Body

- Normal work clothing (long sleeved shirts and long pants) is recommended.

General Industrial Hygiene Considerations

- Use good industrial hygiene practices in handling this material.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

STEL = Short Term Exposure Limits are based on 15-minute exposures

BEI = Biological Exposure Indices

TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)

NIOSH = National Institute of Occupational Safety and Health

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

OSHA = Occupational Safety and Health Administration

TWAEV = Time-Weighted Average Exposure Value

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Polyester-reinforced, polymer-modified asphaltic material with sand, ceramic granules and/or plastic film covered surfaces and an asphalt odor. Various colors available.
Color	Various colors.	Odor	Asphalt odor.
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking

Specific Gravity/Relative Density	Data lacking	Water Solubility	Insoluble
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal conditions of use.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Incompatible materials.

10.5 Incompatible materials

- This product will react with strong oxidizing agents, reducing agents, strong acids and alkalis.

10.6 Hazardous decomposition products

- Burning will produce smoke, carbon monoxide, and carbon dioxide.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

		Components
Asphalt (40% TO 60%)	8052-42-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • >5000 mg/kg; <i>Gastrointestinal:Hypermotility, diarrhea</i> ; Inhalation-Rat LC50 • >94.4 mg/m ³ ; Mutagen: Micronucleus test • Unreported Route-Rat • Other Cell Type • 57.8 µg/L; Tumorigen / Carcinogen: Skin-Mouse TDLo • 905 g/kg 2 Year(s)-Intermittent; <i>Tumorigenic:Neoplastic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Skin and Appendages:Other:Tumors</i>
Limestone (< 25%)	1317-65-3	Multi-dose Toxicity: Inhalation-Rat TCLo • 84 mg/m ³ 4 Hour(s) 40 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Fibrosis (interstitial); Liver:Other changes; Kidney, Ureter, and Bladder:Other changes</i> ; Inhalation-Rat TCLo • 250 mg/m ³ 2 Hour(s) 24 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Fibrosis, focal (pneumoconiosis)</i>
Quartz (< 10%)	14808-60-7	Acute Toxicity: Inhalation-Rat TCLo • 1 mg/kg; <i>Lungs, Thorax, or Respiration:Other changes; Biochemical:Metabolism (intermediary):Effect on inflammation or mediation of inflammation</i> ; Mutagen: Micronucleus test • Unreported Route-Hamster • Lung (Somatic cell) • 160 µg/cm ³ ; Tumorigen / Carcinogen: Inhalation-Rat TCLo • 50 mg/m ³ 6 Hour(s) 71 Week(s)-Intermittent;

Tumorigenic: Carcinogenic by RTECS criteria; Liver: Tumors

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-SE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-RE	EU/CLP • Specific Target Organ Toxicity Repeated Exposure 1 OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1

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

- Temporary irritation of nose and throat may occur.

Chronic (Delayed)

- This product contains crystalline silica which is listed by IARC as a suspect carcinogen. Silicosis (pulmonary fibrosis or severe lung scarring) may occur if exposed to high levels or repeated encounters with dust. Exposure to airborne particles that exceed the limits listed may cause lung cancer. This product also contains petroleum asphalt. If heated, there is limited evidence that derivatives of asphalt fumes may cause carcinogenic effects in animals. There is inadequate evidence to support that asphalt fumes alone are carcinogenic to humans.

Skin**Acute (Immediate)**

- Mechanical irritation of the skin/skin abrasion may occur characterized by itching or redness.

Chronic (Delayed)

- No data available

Eye**Acute (Immediate)**

- Mechanical irritation of the eye may occur characterized by itching or redness.

Chronic (Delayed)

- No data available.

Ingestion**Acute (Immediate)**

- Ingestion of this product unlikely.

Chronic (Delayed)

- No data available.

Carcinogenic Effects

- When used under normal conditions, this product is not considered a carcinogen.

Based upon the newly published IARC classifications for bitumen/asphalt fumes, it has been determined that the IARC carcinogen designation does not apply to this material as it does not contain material identified by IARC. This product contains crystalline silica. IARC Monographs on Evaluation of Carcinogenic Risk of Chemicals to Humans (Monograph 68, 1997) concludes that there is sufficient evidence for the carcinogenicity of crystalline silica to humans, IARC (Group I). Crystalline Silica is classified as a Known Carcinogen according to the NTP.

Carcinogenic Effects			
	CAS	IARC	NTP
Quartz	14808-60-7	Group 1-Carcinogenic	Known Human Carcinogen

Key to abbreviations

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

- No information available for the product.

12.2 Persistence and degradability

- No information available for the product.

12.3 Bioaccumulative potential

- No information available for the product.

12.4 Mobility in Soil

- No information available for the product.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

Ecological Fate

- No information available for the product.

12.7 Other Information

- This product has not been tested. Based on information related to all raw materials in the finished product it is not expected to harm ecosystems through its applied use.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

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

Packaging waste

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

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards

DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
ADN	NDA	Not Regulated	NDA	NDA	NDA
ADR/RID	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

14.6 Special precautions for user • None specified.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code • Data lacking.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Chronic

State Right To Know				
Component	CAS	MA	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes
Limestone	1317-65-3	Yes	Yes	Yes
Quartz	14808-60-7	Yes	Yes	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Asphalt	8052-42-4	Yes	No	Yes	Yes	No
Limestone	1317-65-3	No	Yes	Yes	Yes	No
Quartz	14808-60-7	Yes	No	Yes	Yes	No

Inventory (Con't.)				
Component	CAS	Japan ENCS	Korea KECL	TSCA
Asphalt	8052-42-4	Yes	Yes	Yes
Limestone	1317-65-3	Yes	Yes	Yes
Quartz	14808-60-7	Yes	Yes	Yes

Australia

Labor

Australia - Work Health and Safety Regulations - Hazardous Substances Requiring Health Monitoring

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Demographic, medical and occupational history; Records of personal exposure; Standardised respiratory questionnaire to be completed; Standardised respiratory function test, for example, FEV1, FVC and FEV1/FVC; Chest X-ray full size PA view

Australia - High Volume Industrial Chemicals List

• Asphalt	8052-42-4	
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	

Australia - List of Designated Hazardous Substances - Classification

• Asphalt	8052-42-4	Self classification required (petroleum fumes)
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Self classification required

Environment**Australia - National Pollutant Inventory (NPI) Substance List**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Australia - Ozone Protection Act - Scheduled Substances

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Australia - Priority Existing Chemical Program

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Belgium**Labor****Belgium - Substances and Preparations - Carcinogens and Mutagens**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Bulgaria**Environment****Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 24 Hour**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 30 Minute

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - Annual

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Canada

Labor**Canada - WHMIS - Classifications of Substances**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	D2A
		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 Division website.)
• Quartz	14808-60-7	

Canada - WHMIS - Ingredient Disclosure List

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	1 %

Environment**Canada - CEPA - Priority Substances List**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

China**Other****China - Annex I & II - Controlled Chemicals Lists**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Denmark**Environment****Denmark - List of Undesirable Substances - Product Groups/Function**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Europe**Other****EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany**Labor****Germany - Immission Control - Qualifying Quantities for Major Accident Prevention**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - Immission Control - Qualifying Quantities for Safety Reporting

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - TRGS 505 - Specific Lead Regulations

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - TRGS 511 - Specific Ammonium Nitrate Regulations

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Environment**Germany - TA Luft - Types and Classes**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - TA Luft - Emission Limits for Carcinogenic Substances

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - TA Luft - Emission Limits for Fibers

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Dusts

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Gases

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - TA Luft - Emission Limits for Organic Substances

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - Water Classification (VwVwS) - Annex 1

• Asphalt	8052-42-4	ID Number 326, not considered hazardous to water
• Limestone	1317-65-3	ID Number 317, not considered hazardous to water
• Quartz	14808-60-7	ID Number 849, not considered hazardous to water

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Germany - Water Classification (VwVwS) - Annex 3

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	ID Number 849, not considered hazardous to water

United States**Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

Environment**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

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

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

United States - California**Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)

U.S. - California - Proposition 65 - Developmental Toxicity

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

United States - Pennsylvania

Labor**U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Asphalt	8052-42-4	Not Listed
• Limestone	1317-65-3	Not Listed
• Quartz	14808-60-7	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

15.3 Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information**Relevant Phrases (code & full text)**

- H315 - Causes skin irritation
R38 - Irritating to skin.

Revision Date

- 19/January/2018

Preparation Date

- 11/August/2010

Other Information

- Changes to this revision: Updated mailing address.

Disclaimer/Statement of Liability

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Key to abbreviations

NDA = No Data Available