

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 • **MB Base**

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]

2.1 Classification of the substance or mixture

CLP • Carcinogenicity 1B - H350
Specific Target Organ Toxicity Repeated Exposure 1 - H372

2.2 Label Elements

CLP

DANGER

Hazard statements • H350 - May cause cancer.
H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention • P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P264 - Wash thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P281 - Use personal protective equipment as required.

Response • P308+P313 - IF exposed or concerned: Get medical advice/attention.
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.

2.3 Other Hazards

- CLP**
- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

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

2.2 Label elements

OSHA HCS 2012

DANGER



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

Precautionary statements

- Prevention** • Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • IF exposed or concerned: Get medical advice/attention.
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 - D2A
Other Toxic Effects - D2B

2.2 Label elements

WHMIS



- WHMIS**
- Other Toxic Effects - D2A
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 |
| Petroleum asphalt, oxidized | CAS:64742-93-4 EINECS:265-196-4 | < 75% | NDA | EU CLP: Carc. 1B, H350 OSHA HCS 2012: Carc. 1B | NDA |
| Quartz | CAS:14808-60-7 EC Number:238-878-4 | < 25% | NDA | EU CLP: Carc. 1A, H350; STOT RE 1, H372; OSHA HCS 2012: Carc. 1A; STOT RE 1; | NDA |
| Glass, oxide, chemicals | CAS:65997-17-3 EC Number:266-046-0 | < 8% | NDA | EU CLP: Not Classified OSHA HCS 2012: Not Classified | NDA |

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. If signs/symptoms continue, get medical attention.

Skin

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. If irritation develops and persists, get medical attention.

Eye

- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion

- Rinse mouth. Do not give anything by mouth to an unconscious person. Obtain medical attention immediately if ingested.

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 • Alcohol foam, carbon dioxide, or dry chemical.

Unsuitable Extinguishing Media • No data available.

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

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. Cool fire exposed containers with water.

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 special emergency procedures are expected to be needed as this material is a solid sheet.

6.2 Environmental precautions

- Follow best practices with picking up pieces and disposing of properly.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Pick up large pieces. Sweep and scoop up material and put into a suitable container for disposal.

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

- Use only with adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing dust. Avoid contact with skin and eyes. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a well-ventilated place.

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 |
| | | | | | | |

| | | | | | | |
|-------------------------|------|---|---|---|---|--|
| Glass, oxide, chemicals | TWAs | 1 fiber/cm ³ TWA (respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers) <i>as Glass wool fiber</i> | Not established | 10 mg/m ³ TWA (dust and fiber) | 1 fibre/cm ³ TWA <i>as Glass wool fiber</i> | 1 fibre/cm ³ TWA (fibres >5 µm, with an aspect ratio of ≥3:1, as determined by the membrane filter method at 400-450 times magnification (4 mm objective), using phase-contrast illumination, listed under Synthetic vitreous fibres) <i>as Glass wool fiber</i> |
| 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) |

Exposure Limits/Guidelines (Con't.)

| | Result | Canada Manitoba | Canada New Brunswick | Canada Northwest Territories | Canada Nova Scotia | Canada Nunavut |
|-------------------------|--------|---|---|---|---|---|
| Glass, oxide, chemicals | TWAs | 1 fiber/cm ³ TWA (length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, respirable fibers, listed under Synthetic vitreous fibers) <i>as Glass wool fiber</i> | 1 fibre/cm ³ TWA (fibres >5 µm with a diameter <3 µm, aspect ratio >5:1) <i>as Glass wool fiber</i> | 3 fibre/cm ³ TWA (with a diameter ≤3.5 µm and a length ≥10 µm); 5 mg/m ³ TWA (total mass) <i>as Glass wool fiber</i> | 1 fiber/cm ³ TWA (length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, respirable fibers, listed under Synthetic vitreous fibers) <i>as Glass wool fiber</i> | 3 fibre/cm ³ TWA (with a diameter ≤3.5 µm and a length ≥10 µm); 5 mg/m ³ TWA (total mass) <i>as Glass wool fiber</i> |
| 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) |

Exposure Limits/Guidelines (Con't.)

| | Result | Canada Ontario | Canada Quebec | Canada Saskatchewan | Canada Yukon | China |
|-------------------------|--------|---|--|---|--|-----------------|
| Glass, oxide, chemicals | TWAs | 1 fibre/cm ³ TWA (fibres >5 µm in length and an aspect ratio ≥3:1 as determined by the membrane filter method at 400-450 times magnification (4 -mm objective), using phase-contrast illumination, respirable, listed under Synthetic Vitreous Fibres (Man Made Mineral Fibres)) | 1 fibre/cm ³ TWAEV (respirable, listed under Fibres - Artificial Vitreous Mineral Fibres) <i>as Glass wool fiber</i> | 1 fibre/cm ³ TWA (respirable fibres, listed under Synthetic vitreous fibres) <i>as Glass wool fiber</i> | 30 mppcf TWA (dust or fibrous); 10 mg/m ³ TWA (dust or fibrous) | Not established |

| | | | | | | |
|------------------------|-------|---|-----------------------------------|---|---|---|
| | | <i>as Glass wool fiber</i> | | | | |
| Quartz (14808-60-7) | STELs | Not established | Not established | Not established | Not established | 2 mg/m3 STEL (containing 10-50% free SiO2, total dust); 1.4 mg/m3 STEL (containing 50-80% free SiO2, total dust); 1 mg/m3 STEL (containing >80% free SiO2, total dust); 1.4 mg/m3 STEL (containing 10-50% free SiO2, respirable dust); 0.6 mg/m3 STEL (containing 50-80% free SiO2, respirable dust); 0.4 mg/m3 STEL (containing >80% free SiO2, respirable dust) |
| | TWAs | 0.10 mg/m3 TWA (designated substances regulation, respirable, listed under Silica, crystalline) | 0.1 mg/m3 TWAEV (respirable dust) | 0.05 mg/m3 TWA (respirable fraction, listed under Silica - crystalline) | 300 particle/mL TWA (listed under Silica) | 0.7 mg/m3 TWA (containing 50-80% free SiO2, total dust); 0.3 mg/m3 TWA (containing 50-80% free SiO2, respirable dust); 1 mg/m3 TWA (containing 10-50% free SiO2, total dust); 0.7 mg/m3 TWA (containing 10-50% free SiO2, respirable dust); 0.5 mg/m3 TWA (containing >80% free SiO2, total dust); 0.2 mg/m3 TWA (containing >80% free SiO2, respirable dust) |

Exposure Limits/Guidelines (Con't.)

| | Result | Denmark | NIOSH |
|-------------------------|--------|---|--|
| Glass, oxide, chemicals | TWAs | 1 fiber/cm3 TWA <i>as Glass wool fiber</i> | 3 fiber/cm3 TWA (fibers <= 3.5 µm in diameter and >= 10 µm in length); 5 mg/m3 TWA (total) <i>as Glass wool fiber</i> |
| Quartz (14808-60-7) | TWAs | 0.3 mg/m3 TWA (total); 0.1 mg/m3 TWA (respirable) | 0.05 mg/m3 TWA (respirable dust) |

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

•Glass, oxide, chemicals *as Glass wool fiber*: **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed

under Synthetic vitreous fibers))

•Quartz (14808-60-7): **Carcinogens:** (A2 - Suspected Human Carcinogen)

Germany DFG

•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

•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 be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- Where respiratory protection is needed to control personnel exposures, follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH or European Standard EN 149 certified respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety goggles.

Skin/Body

- Wear appropriate gloves. Wear long sleeves and/or protective coveralls.

Environmental Exposure Controls

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

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

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

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

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

| Material Description | | | |
|-----------------------------------|----------------|------------------------------|--|
| Physical Form | Solid | Appearance/Description | Black mat with sand surface and an asphalt odor. |
| Color | Black | Odor | Asphalt odor. |
| Odor Threshold | Data lacking | | |
| General Properties | | | |
| Boiling Point | Data lacking | Melting Point/Freezing Point | 200 °C(392 °F) |
| Decomposition Temperature | Data lacking | pH | Data lacking |
| Specific Gravity/Relative Density | = 1.05 Water=1 | 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 temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization not indicated.

10.4 Conditions to avoid

- No data available.

10.5 Incompatible materials

- No data available.

10.6 Hazardous decomposition products

- No data available.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

| | | Components |
|----------------|------------|--|
| Quartz (< 25%) | 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; <i>Tumorigenic:Carcinogenic by RTECS criteria; Liver:Tumors</i> |

| 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 • Carcinogenicity 1B OSHA HCS 2012 • Carcinogenicity 1B |
| 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)

- Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.

Chronic (Delayed)

- Prolonged and repeated exposure to crystalline silica containing dust can result in injury to the lungs. This condition is known as silicosis. Silicosis is characterized by the shortness of breath, decreased expansion of the chest, dry cough, leading to fatigue, dyspnea, and cyanosis, loss of appetite, pleuritic pain and decreased work capacity.

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)

- Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

Chronic (Delayed)

- No data available.

Carcinogenic Effects

- Repeated and prolonged exposure may cause cancer.

| Carcinogenic Effects | | | |
|-----------------------------|------------|------------------------------|------------------------|
| | CAS | IARC | NTP |
| Quartz | 14808-60-7 | Group 1-Carcinogenic | Known Human Carcinogen |
| Petroleum asphalt, oxidized | 64742-93-4 | Group 2A-Probable Carcinogen | Not Listed |

Key to abbreviations

TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

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

Packaging waste

- Not applicable as this material is not in a container.

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 |
| Glass, oxide, chemicals | 65997-17-3 | No | No | No |
| Petroleum asphalt, oxidized | 64742-93-4 | No | Yes | No |
| Quartz | 14808-60-7 | Yes | Yes | Yes |

| Inventory | | | | | | |
|-----------------------------|------------|------------|-------------|-------|-----------|-----------|
| Component | CAS | Canada DSL | Canada NDSL | China | EU EINECS | EU ELNICS |
| Glass, oxide, chemicals | 65997-17-3 | Yes | No | Yes | Yes | No |
| Petroleum asphalt, oxidized | 64742-93-4 | Yes | No | Yes | Yes | No |
| Quartz | 14808-60-7 | Yes | No | Yes | Yes | No |

| Inventory (Con't.) | | | | |
|-----------------------------|------------|------------|------------|------|
| Component | CAS | Japan ENCS | Korea KECL | TSCA |
| Glass, oxide, chemicals | 65997-17-3 | Yes | Yes | Yes |
| Petroleum asphalt, oxidized | 64742-93-4 | Yes | Yes | Yes |
| Quartz | 14808-60-7 | Yes | Yes | Yes |

Australia

Labor

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

| | | |
|-------------------------------|------------|---|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | |

Australia - List of Designated Hazardous Substances - Classification

| | | |
|-------------------------------|------------|------------------------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Self classification required |

Environment

Australia - National Pollutant Inventory (NPI) Substance List

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Australia - Ozone Protection Act - Scheduled Substances

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Australia - Priority Existing Chemical Program

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Belgium

Labor

Belgium - Substances and Preparations - Carcinogens and Mutagens

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Bulgaria

Environment

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Canada

Labor

Canada - WHMIS - Classifications of Substances

| | | |
|-------------------------------|------------|--|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | 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.) |

Canada - WHMIS - Ingredient Disclosure List

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | 1 % |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Germany - Immission Control - Qualifying Quantities for Safety Reporting

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Germany - TRGS 505 - Specific Lead Regulations

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Germany - TRGS 511 - Specific Ammonium Nitrate Regulations

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Germany - TA Luft - Emission Limits for Carcinogenic Substances

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Germany - TA Luft - Emission Limits for Fibers

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Germany - TA Luft - Emission Limits for Inorganic Dusts

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Germany - TA Luft - Emission Limits for Inorganic Gases

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Germany - TA Luft - Emission Limits for Organic Substances

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

Germany - Water Classification (VwVwS) - Annex 1

| | | |
|-------------------------------|------------|--|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | ID Number 849, not considered hazardous to water |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |

| | | |
|---|------------|--|
| • Quartz | 14808-60-7 | Not Listed |
| Germany - Water Classification (VwVwS) - Annex 3 | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 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 | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |
| U.S. - OSHA - Specifically Regulated Chemicals | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

| | | |
|--|------------|------------|
| Environment | | |
| U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |
| U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |
| U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |
| U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |
| U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |
| U.S. - CERCLA/SARA - Section 313 - Emission Reporting | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |
| U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing | | |
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

United States - California

Environment

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

| | | |
|-------------------------------|------------|---|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | carcinogen, initial date 10/1/88 (airborne particles of respirable size) |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

United States - Pennsylvania

Labor

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | Not Listed |
| • Quartz | 14808-60-7 | Not Listed |

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

| | | |
|-------------------------------|------------|------------|
| • Petroleum asphalt, oxidized | 64742-93-4 | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 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

- | | |
|--|--|
| Revision Date | <ul style="list-style-type: none">• 26/January/2018 |
| Preparation Date | <ul style="list-style-type: none">• 08/June/2012 |
| Other Information | <ul style="list-style-type: none">• Changes to this revision: Updated mailing address. |
| Disclaimer/Statement of Liability | <ul style="list-style-type: none">• The information contained herein is based on data considered accurate which has been obtained from other companies and organizations. However, no warranty or representation is expressed or implied that the information, is accurate, complete or representative. Firestone Building Products Company, LLC assumes no responsibility for injury to the buyer, the buyer's employees, or any third persons, if reasonable safety procedures are not followed. Additionally, Firestone Building Products Company, LLC assumes no responsibility for injury to buyer, the buyer's employees, or any third persons caused by abnormal use of this material, even if reasonable safety procedures are followed. |

Key to abbreviations

NDA = No data available