

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 • UltraWhite™ Granules

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

Relevant identified use(s) • Roofing

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 • Carcinogenicity 1A - H350
Specific Target Organ Toxicity Repeated Exposure 2 - H373

DSD/DPD • Harmful (Xn)
Carcinogenic Substances - Category 1
R48/20, R49

2.2 Label Elements

CLP

WARNING

Hazard statements • H350 - May cause cancer.
H373 - May cause damage to organs - Lungs through prolonged or repeated exposure via Inhalation

Precautionary statements

Prevention • P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust.
 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.

DSD/DPD



Risk phrases • R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 R49 - May cause cancer by inhalation.

Safety phrases • S53 - Avoid exposure - obtain special instructions before use.

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 preparation 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 • Carcinogenicity 1A
 Specific Target Organ Toxicity Repeated Exposure 1

2.2 Label elements

OSHA HCS 2012

DANGER



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

Precautionary statements

Prevention • Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not breathe 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

2.2 Label elements

WHMIS •



WHMIS • Other Toxic Effects - D2A

2.3 Other hazards

WHMIS •

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

2.4 Other information

- Due to the size of the material, inhalation (and hazard risk) is limited to residual fine dust in the container.

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

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Not hazardous	NDA	> 95%	NDA	EU DSD/DPD: Not hazardous EU CLP: Not hazardous OSHA HCS 2012: Not hazardous	NDA
Quartz	CAS:14808-60-7 EC Number:238-878-4	<= 5%	NDA	EU DSD/DPD: Self Classified: Carc. 1, R49; T, R48/20 EU CLP: Self Classified: Carc. 1A, H350; STOT RE 1, H372 OSHA HCS 2012: Carc. 1A; STOT RE 1 (Lungs, Inhl)	NDA

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

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. 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

- Drink 1 - 2 glasses of water. Get medical attention if symptoms occur.

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 • LARGE FIRE: Water spray, fog or regular foam.
SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media • No data available.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • Material is non-combustible and is not expected to pose a fire or explosion hazard.

Hazardous Combustion Products • No data available.

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions • Do not walk through spilled material. Avoid generating dust. Do not breathe dust. Wear appropriate personal protective equipment.

Emergency Procedures • In the event of a major spill, wet down material with water to prevent dusting, followed by scooping up product for disposal.

6.2 Environmental precautions

- No special precautions necessary.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures • Avoid generating dust.
Wet down material with water prior to cleanup to control dust.
SMALL DRY SPILLS: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
LARGE SPILLS: Cover powder spill with plastic sheet or tarp to minimize spreading. Flush spill area with water spray.

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 • Do not use in areas without adequate ventilation. Minimize dust generation and accumulation. Wear appropriate personal protective equipment, avoid direct contact. 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 • Ventilate enclosed areas. Keep container closed.

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	Belgium	Canada Alberta	Canada British Columbia	Canada Manitoba
Quartz (14808-60-7)	TWAs	0.025 mg/m ³ TWA (respirable fraction)	0.1 mg/m ³ TWA (alveolar dust)	0.025 mg/m ³ TWA (respirable particulate)	0.025 mg/m ³ TWA (respirable)	0.025 mg/m ³ TWA (respirable fraction)
Exposure Limits/Guidelines (Con't.)						
	Result	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut	Canada Ontario
Quartz (14808-60-7)	TWAs	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)	0.10 mg/m ³ TWA (designated substance regulation, respirable)
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Quebec	Canada Saskatchewan	Canada Yukon	Denmark	NIOSH
Quartz (14808-60-7)	TWAs	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)	0.3 mg/m ³ TWA (total); 0.1 mg/m ³ TWA (respirable)	0.05 mg/m ³ TWA (respirable dust)

Exposure Control Notations

Germany DFG

- Quartz (14808-60-7): **Carcinogens:** (Category 1 (causes cancer in man, alveola fraction))

8.2 Exposure controls

Engineering Measures/Controls

- 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

- Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Eye/Face

- Wear safety goggles.

Skin/Body

- Wear appropriate gloves.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

TWAEV = Time-Weighted Average Exposure Value

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

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	White granules with no odor.
Color	White	Odor	Odorless
Particulate Type	Dust	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	2.6 to 2.7 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

Other Material Information • Due to the size of the material, inhalation (and hazard risk) is limited to residual fine

dust in the container.

Components		
Quartz (<= 5%)	14808-60-7	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 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	EU/CLP • Carcinogenicity 1A OSHA HCS 2012 • Carcinogenicity 1A
Germ Cell Mutagenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-SE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-RE	EU/CLP • Specific Target Organ Toxicity Repeated Exposure 2 OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1

Route(s) of entry/exposure

- Inhalation, Skin, Eye, Ingestion

Medical Conditions Aggravated by Exposure

- Disorders of the lungs.

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

- Exposure to dust may cause irritation. 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)

- Chronic overexposure to dust containing respirable sized crystalline silica can causedelayed lung injury (silicosis). Inhalation of dust containing crystalline silica pulmonarydiseases such as asthma and lung disorder associated with smoking.

Skin**Acute (Immediate)**

- Exposure to dust may cause mechanical irritation.

Chronic (Delayed)

- No data available.

Eye**Acute (Immediate)**

- Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.

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

- May cause cancer. 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

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 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 known.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code • Not relevant.

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
Quartz	14808-60-7	Yes	Yes	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
Quartz	14808-60-7	Yes	No	Yes	No	Yes

Belgium

Labor

Belgium - Substances and Preparations - Carcinogens and Mutagens

• Quartz 14808-60-7 Not Listed

Bulgaria

Environment

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

• Quartz 14808-60-7 Not Listed

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

• Quartz 14808-60-7 Not Listed

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

• Quartz 14808-60-7 Not Listed

Canada

Labor

Canada - WHMIS - Classifications of Substances

• 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

• Quartz	14808-60-7	1 %
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Environment**Canada - CEPA - Priority Substances List**

• Quartz	14808-60-7	Not Listed
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Denmark**Environment****Denmark - List of Undesirable Substances - Product Groups/Function**

• Quartz	14808-60-7	Not Listed
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Europe**Other****EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification**

• Quartz	14808-60-7	Not Listed
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Quartz	14808-60-7	Not Listed
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Quartz	14808-60-7	Not Listed
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Quartz	14808-60-7	Not Listed
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Quartz	14808-60-7	Not Listed
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Germany**Labor****Germany - Immission Control - Qualifying Quantities for Major Accident Prevention**

• Quartz	14808-60-7	Not Listed
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Germany - Immission Control - Qualifying Quantities for Safety Reporting

• Quartz	14808-60-7	Not Listed
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Germany - TRGS 505 - Specific Lead Regulations

• Quartz	14808-60-7	Not Listed
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Germany - TRGS 511 - Specific Ammonium Nitrate Regulations

• Quartz	14808-60-7	Not Listed
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Environment**Germany - TA Luft - Types and Classes**

• Quartz	14808-60-7	Not Listed
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Germany - TA Luft - Emission Limits for Carcinogenic Substances

• Quartz	14808-60-7	Not Listed
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Germany - TA Luft - Emission Limits for Fibers

• Quartz	14808-60-7	Not Listed
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Germany - TA Luft - Emission Limits for Inorganic Dusts

• Quartz	14808-60-7	Not Listed
Germany - TA Luft - Emission Limits for Inorganic Gases		
• Quartz	14808-60-7	Not Listed
Germany - TA Luft - Emission Limits for Organic Substances		
• Quartz	14808-60-7	Not Listed
Germany - Water Classification (VwVwS) - Annex 1		
• Quartz	14808-60-7	ID Number 849, not considered hazardous to water
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
• Quartz	14808-60-7	Not Listed
Germany - Water Classification (VwVwS) - Annex 3		
• Quartz	14808-60-7	ID Number 849, not considered hazardous to water

United States

Labor		
U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals		
• Quartz	14808-60-7	Not Listed
U.S. - OSHA - Specifically Regulated Chemicals		
• Quartz	14808-60-7	Not Listed

Environment		
U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
• Quartz	14808-60-7	Not Listed
U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
• Quartz	14808-60-7	Not Listed
U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• Quartz	14808-60-7	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
• Quartz	14808-60-7	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
• Quartz	14808-60-7	Not Listed
U.S. - CERCLA/SARA - Section 313 - Emission Reporting		
• Quartz	14808-60-7	Not Listed
U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing		
• Quartz	14808-60-7	Not Listed

United States - California

Environment		
U.S. - California - Proposition 65 - Carcinogens List		
• Quartz	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)

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

• Quartz	14808-60-7	Not Listed
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U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Quartz	14808-60-7	Not Listed
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U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Quartz	14808-60-7	Not Listed
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U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Quartz	14808-60-7	Not Listed
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U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Quartz	14808-60-7	Not Listed
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United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Quartz	14808-60-7	Not Listed
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U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Quartz	14808-60-7	Not Listed
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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**

- 29/January/2018

Preparation Date

- 22/March/2010

Other Information

- Changes to this revision: Updated mailing address.

Disclaimer/Statement of Liability

- 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 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