



# Safety Data Sheet

## Versashield SOLO Fire Resistant Slip Sheet

### SIGNS & SYMPTOMS OF EXPOSURE

<b>EYES:</b>	Potential for eye irritation.
<b>SKIN:</b>	Potential for skin irritation.
<b>INGESTION:</b>	Not expected to be ingested.
<b>INHALATION:</b>	Not a source of exposure.
<b>ACUTE HEALTH HAZARDS:</b> concentrations	Excessive grinding or abrasion of this product may create airborne dust and fiber concentrations in excess of exposure limits. Exposure to in excess of the exposure limits may cause severe respiratory irritation, skin irritation and/or eye irritation.
<b>CHRONIC HEALTH HAZARD:</b> chronic skin	Repeated and/or prolonged exposure to dust and fibers at concentrations in excess of exposure limits may result in respiratory damage, irritation and/or eye injury.

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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous components

##### 1. Limestone

Concentration	Not specified
EC no.	215-279-6
CAS no.	1317-65-3

##### 2. GRAPHITE powder

Concentration	Not specified
EC no.	231-955-3
CAS no.	7782-42-5

##### 3. Glass Beads

Concentration	Not specified
EC no.	266-046-0
CAS no.	65997-17-3

##### 4. Aluminum hydroxide

Concentration	Not specified
EC no.	244-492-7
CAS no.	21645-51-2

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### 5. Sulfuric acid

Concentration Not specified  
EC no. 231-639-5  
CAS no. 7664-93-9  
Index no. 016-020-00-8

- Skin corrosion/irritation, Cat. 1A

H314 Causes severe skin burns and eye damage  
SCLs/M-factors/ATEs Skin Corr. 1A; H314:  $C \geq 15\%$   
Skin Irrit. 2; H315:  $5\% \leq C < 15\%$   
Eye Irrit. 2; H319:  $5\% \leq C < 15\%$

### 6. Nitric acid

Concentration Not specified  
EC no. 231-714-2  
CAS no. 7697-37-2  
Index no. 007-004-00-1

- Corrosive to metals, Cat. 1  
- Skin corrosion/irritation, Cat. 1A  
- Eye damage/irritation, Cat. 1  
- Oxidizing liquids, Cat. 2  
- Acute toxicity, dermal, Cat. 3  
- Acute toxicity, inhalation, Cat. 1

H272 May intensify fire; oxidizer  
H290 May be corrosive to metals  
H311 Toxic in contact with skin  
H314 Causes severe skin burns and eye damage  
H318 Causes serious eye damage  
H330 Fatal if inhaled  
SCLs/M-factors/ATEs Ox. Liq. 2; H272:  $C \geq 99\%$   
Ox. Liq. 3; H272:  $65\% \leq C < 99\%$   
Skin Corr. 1A; H314:  $C \geq 20\%$   
Skin Corr. 1B; H314:  $5\% \leq C < 20\%$

### 7. Silica, crystalline

Concentration Not specified  
EC no. 238-878-4  
CAS no. 14808-60-7

- Carcinogenicity, Cat. 1A  
- Specific target organ toxicity (repeated exposure), Cat. 1

### 8. Non-Hazardous Ingredients

Concentration Not specified

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### SECTION 4: First-aid measures

#### 4.1 Description of necessary first-aid measures

If inhaled	Remove affected persons from source of exposure. Seek medical attention if irritation persists or if affected persons develop breathing difficulties.
In case of skin contact	Flush with clean water for at least 15 minutes. Seek medical attention if irritation persists.
In case of eye contact	Flush with clean water for at least 15 minutes. Seek medical attention if irritation persists.
If swallowed	This product is not intended for consumption or direct contact with any type of food or beverage. Seek medical attention if this product is ingested.
Personal protective equipment for first-aid responders	None.

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### SECTION 5: Fire-fighting measures

#### 5.1 Suitable extinguishing media

Water, Foam, Dry Chemical, Sand and Carbon Dioxide

#### 5.2 Specific hazards arising from the chemical

Carbon dioxide and carbon monoxide.

#### 5.3 Special protective actions for fire-fighters

Treat with generally accepted practices for combustible products.

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### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Collect spilled material in appropriate containers for reuse or disposal. Avoid dry sweeping and other spill removal procedures that may create airborne dust and fibers.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

No specific handling or storage requirements.

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### 1. Limestone (CAS: 1317-65-3)

PEL (Inhalation): see PNOR (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 15 mg/m<sup>3</sup> (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 10 mg/m<sup>3</sup> (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

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REL (Inhalation): 10 mg/m<sup>3</sup> (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 5 mg/m<sup>3</sup> (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 5 mg/m<sup>3</sup> (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): 5 mg/m<sup>3</sup> (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): see PNOR (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 15 mg/m<sup>3</sup> (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 10 mg/m<sup>3</sup> (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): 10 mg/m<sup>3</sup> (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 5 mg/m<sup>3</sup> (OSHA)  
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OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): 5 mg/m<sup>3</sup> (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): See PNOR (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 15 mg/m<sup>3</sup> (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 10 mg/m<sup>3</sup> (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): 10 mg/m<sup>3</sup> (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 5 mg/m<sup>3</sup> (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 5 mg/m<sup>3</sup> (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): 5 mg/m<sup>3</sup> (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

#### **2. GRAPHITE powder (CAS: 7782-42-5)**

PEL (Inhalation): See Annotated Z-3 ppm (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): See Annotated Z-3 mg/m<sup>3</sup> (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): See Annotated Z-3 (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): See Annotated Z-3 (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

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PEL (Inhalation): 15 mg/m<sup>3</sup> (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 10 mg/m<sup>3</sup> (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): See Appendix D (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 5 mg/m<sup>3</sup> (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 5 mg/m<sup>3</sup> (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

TWA (Inhalation): 3 mg/m<sup>3</sup>; Australia (AU/SWA)  
Notes: (e)

#### 3. Sulfuric acid (CAS: 7664-93-9 EC: 231-639-5)

PEL (Inhalation): 1 mg/m<sup>3</sup> (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 0.1 mg/m<sup>3</sup>, (ST) 3 mg/m<sup>3</sup> (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): 1 mg/m<sup>3</sup>; USA (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

TLV® (Inhalation): 0.2 mg/m<sup>3</sup>, (Thor.); USA (ACGIH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

TWA (Inhalation): 0.2 mg/m<sup>3</sup>; USA (ACGIH)  
USA. ACGIH Threshold Limit Values (TLV)

TWA (Inhalation): 1 mg/m<sup>3</sup>; USA (OSHA)  
USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

TWA (Inhalation): 1 mg/m<sup>3</sup>; Australia (AU/SWA)

STEL (Inhalation): 3 mg/m<sup>3</sup>; Australia (AU/SWA)

#### 4. Nitric acid (CAS: 7697-37-2)

TLV® (Inhalation): 2 ppm (ACGIH)  
Upper Respiratory Tract irritation. Eye irritation. Dental erosion

STEL (Inhalation): 4 ppm (ACGIH)  
Upper Respiratory Tract irritation. Eye irritation. Dental erosion

REL-TWA (Inhalation): 2 ppm. 5 mg/m<sup>3</sup> (NIOSH)

REL-ST (Inhalation): 4 ppm. 10 mg/m<sup>3</sup> (NIOSH)

PEL-TWA (Inhalation): 2 ppm. 5 mg/m<sup>3</sup> (OSHA)

PEL-TWA (Inhalation): 2 ppm. 5 mg/m<sup>3</sup> (Cal/OSHA)

PEL-ST (Inhalation): 4 ppm. 10 mg/m<sup>3</sup> (Cal/OSHA)

TWA (Inhalation): 2 ppm; 5.2 mg/m<sup>3</sup>; Australia (AU/SWA)

STEL (Inhalation): 4 ppm; 10 mg/m<sup>3</sup>; Australia (AU/SWA)

#### 5. Silica, crystalline (CAS: 14808-60-7 EC: 238-878-4)

PEL-TWA (Inhalation): 10 mg/m<sup>3</sup> / (% Silica + 2) respirable 30 mg/m<sup>3</sup> / (% Silica + 2) total (OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 0.05 mg/m<sup>3</sup> (Cal/OSHA)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

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REL (Inhalation): Ca 0.05 mg/m<sup>3</sup> (NIOSH)  
OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

TLV® (Inhalation): 0.025 mg/m<sup>3</sup> (resp.) for α-quartz and cristobalite (ACGIH)

TWA (Inhalation): 0.05 mg/m<sup>3</sup>; Australia (AU/SWA)

Advisory carc cat: Carc. 1A; Other advisory: - ; Notes: See Silica - Crystalline

### 8.2 Appropriate engineering controls

Use of this product is not anticipated to require more than general room ventilation during normal conditions of use that are in accordance with the manufacturer's specified applications. However, use of this product in other applications not specified by the manufacturer could potentially generate airborne dust and fibers that may require additional mechanical exhaust to prevent employee overexposures. Excessive grinding or abrasion of this product may create airborne dust and fiber concentrations in excess of exposure limits. If employee exposures exceed the exposure limits, local exhaust ventilation or other mechanical ventilation systems may be required to reduce such exposures to concentrations below the exposure limits.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear safety glasses with sideshields or safety goggles.

#### Skin protection

Wear sturdy work gloves and intact clothing with long sleeves and long pants.

#### Body protection

**OTHER PROTECTIVE EQUIPMENT:** Wear appropriate closed-toe shoes or boots.

**WORK HYGIENIC PRACTICES:** Employees should avoid eating, drinking, chewing, smoking, taking medication and applying cosmetics in work areas where this product is being installed or removed. Employees should wash their hands and other exposed areas of skin after handling this product and before smoking or consuming anything. Employees should shower at the end of each work shift after installing or removing this product. Work clothing should be washed separately and the washing machine should be wiped out at the end of the washing cycle.

#### Respiratory protection

If employee exposures exceed applicable exposure limits, respiratory protection should be worn. Only NIOSH-approved respirators should be worn. Selection and use of specific respirators should meet applicable standards set by state and Federal OSHA standards for respiratory protection and for the specific substances and concentrations to which employees are exposed.

#### Environmental exposure controls

None.

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## SECTION 9: Physical and chemical properties

### Basic physical and chemical properties

Appearance	Blue-colored, mineral-filled mat
Color	Blue
Odor	Odorless
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.

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Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	No data available.
Kinematic viscosity	No data available.
Solubility	Insoluble
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	No data available.
Relative vapor density	No data available.

### Particle characteristics

No data available.

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## SECTION 10: Stability and reactivity

### 10.2 Chemical stability

Thermal Stability: Stable.

### 10.3 Possibility of hazardous reactions

Will not occur.

### 10.4 Conditions to avoid

None.

### 10.5 Incompatible materials

Strong acids will react with the limestone component releasing carbon dioxide gas.

### 10.6 Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide and Hydrocarbons will result from incomplete combustion of the organic binder if involved in a fire.

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

No information available.

#### Skin corrosion/irritation

No information available.

#### Serious eye damage/irritation

No information available.

#### Respiratory or skin sensitization

No information available.

#### Germ cell mutagenicity

No information available.

#### Carcinogenicity

The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have determined that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form



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of quartz or cristobalite. In addition, IARC has determined that there is sufficient evidence for the carcinogenicity of quartz and cristobalite in experimental animals. Among individuals with silicosis, lung cancer occurs more frequently in those who smoke.

Sulfuric acid contained in strong inorganic acids mists is classified as a group 1 carcinogen (carcinogenic to humans) by the International Agency for Research on Cancer (IARC).

#### **Reproductive toxicity**

No information available.

#### **Specific target organ toxicity (STOT) - single exposure**

No information available.

#### **Specific target organ toxicity (STOT) - repeated exposure**

No information available.

#### **Aspiration hazard**

No information available.

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## SECTION 12: Ecological information

#### **Toxicity**

No data available.

#### **Persistence and degradability**

No data available.

#### **Bioaccumulative potential**

No data available.

#### **Mobility in soil**

No data available.

#### **Results of PBT and vPvB assessment**

No data available.

#### **Endocrine disrupting properties**

No data available.

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## SECTION 13: Disposal considerations

#### **Disposal methods**

#### **Product disposal**

Comply with state and local regulations for disposal.

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## SECTION 14: Transport information

#### **DOT (US)**

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### **IATA**

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Not dangerous goods

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### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations specific for the product in question

##### **New Jersey Right To Know Components**

Common name: CALCIUM CARBONATE

CAS number: 1317-65-3

##### **Pennsylvania Right To Know Components**

Chemical name: Limestone

CAS number: 1317-65-3

##### **Canadian Non-Domestic Substances List (NDSL)**

Chemical name: Limestone

CAS: 1317-65-3

##### **New Jersey Right To Know Components**

Common name: GRAPHITE (NATURAL)

CAS number: 7782-42-5

##### **Pennsylvania Right To Know Components**

Chemical name: Graphite

CAS number: 7782-42-5

##### **Canadian Domestic Substances List (DSL)**

Chemical name: Graphite

CAS: 7782-42-5

##### **Canadian Domestic Substances List (DSL)**

Chemical name: Glass, oxide, chemicals

CAS: 65997-17-3

##### **New Jersey Right To Know Components**

Aluminium hydroxide

CAS-No. 21645-51-2

##### **Pennsylvania Right To Know Components**

Aluminium hydroxide

CAS-No. 21645-51-2

##### **Canadian Domestic Substances List (DSL)**

Chemical name: Aluminum hydroxide (Al(OH)<sub>3</sub>)

CAS: 21645-51-2

##### **Canadian Domestic Substances List (DSL)**

Chemical name: C.I. Pigment White 24

CAS: 8011-94-7

##### **Massachusetts Right To Know Components**

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Sulfuric acid  
CAS number: 7664-93-9

### **New Jersey Right To Know Components**

Sulfuric acid  
CAS number: 7664-93-9

### **Pennsylvania Right To Know Components**

Sulfuric acid  
CAS number: 7664-93-9

### **SARA 302 Components**

The following components are subject to reporting levels established by SARA Title III, Section 302:

Sulfuric acid  
CAS number: 7664-93-9

### **SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

Sulfuric acid  
CAS number: 7664-93-9

### **SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

### **California Prop. 65 Components**

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

Sulfuric acid  
CAS number: 7664-93-9

### **Canadian Domestic Substances List (DSL)**

Chemical name: Sulfuric acid  
CAS: 7664-93-9

### **Massachusetts Right To Know Components**

Chemical name: Nitric acid  
CAS number: 7697-37-2

### **New Jersey Right To Know Components**

Common name: NITRIC ACID  
CAS number: 7697-37-2

### **Pennsylvania Right To Know Components**

Chemical name: Nitric acid  
CAS number: 7697-37-2

### **Canadian Domestic Substances List (DSL)**

Chemical name: Nitric acid  
CAS: 7697-37-2

### **New Jersey Right To Know Components**

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Common name: SILICA, QUARTZ  
CAS number: 14808-60-7

### Massachusetts Right To Know Components

Chemical name: Quartz  
CAS number: 14808-60-7

### California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.  
Quartz  
CAS-No. 14808-60-7

### Pennsylvania Right To Know Components

Chemical name: Quartz  
CAS number: 14808-60-7

### Canadian Domestic Substances List (DSL)

Chemical name: Quartz (SiO<sub>2</sub>)  
CAS: 14808-60-7

### California Prop. 65 components

Chemical name: Silica, crystalline  
CAS number: 14808-60-7  
10/01/1988 - Cancer

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## SECTION 16: Other information

### 16.1 Further information/disclaimer

This information relates to the specific material designated and may not be valid for such material used on combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license of valid patents.