1. Identification

Product identifier: Thinset Filler

Other means of identification: Not available.

Recommended use: Not available.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name: ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc.
Address: 2829 Lakeland Drive
Jackson, MS 39232
USA

After hours telephone number: 1-800-222-7122

Normal work hours telephone number: 1-877-982-7667

Website: www.ergonarmor.com

E-mail: sds@ergon.com

Emergency 24-hour telephone number: CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887

Information on operation hours: 8:00 a.m. to 5:00 p.m.

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Carcinogenicity Category 1A

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Signal word: Danger

Hazard statement: May cause cancer.

Prevention: Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Response: IF exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTZ</td>
<td></td>
<td>14808-60-7</td>
<td>80 - 90</td>
</tr>
<tr>
<td>KAOLIN</td>
<td></td>
<td>1332-58-7</td>
<td>10 - 15</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td></td>
<td>13463-67-7</td>
<td>0.5 - 1.5</td>
</tr>
<tr>
<td>ALUMINIUM OXIDE</td>
<td></td>
<td>1344-28-1</td>
<td>0.4633826508</td>
</tr>
<tr>
<td>SILICON DIOXIDE (AMORPHOUS)</td>
<td></td>
<td>7631-86-9</td>
<td>0.0812916977</td>
</tr>
<tr>
<td>Aluminum Hydroxide</td>
<td></td>
<td>21645-51-2</td>
<td>0.066511389</td>
</tr>
</tbody>
</table>

Material name: Thinset Filler

5346 Version #: 02 Revision date: 01-19-2016 Issue date: 01-27-2015
4. First-aid measures

Inhalation
Move to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. If breathing is difficult, give oxygen. Get medical attention.

Skin contact
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Eye contact
In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. Get medical attention.

Ingestion
Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention.

Most important symptoms/effects, acute and delayed
Not available.

Indication of immediate medical attention and special treatment needed
In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information
IF exposed or concerned: Get medical advice/attention. Keep victim warm. Keep victim under observation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
Not available.

Specific hazards arising from the chemical
Not applicable.

Special protective equipment and precautions for firefighters
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire-fighting equipment/instructions
In the event of fire, cool tanks with water spray.

6. Accidental release measures

Person precautions, protective equipment and emergency procedures
Wear appropriate protective equipment and clothing during clean-up.

Methods and materials for containment and cleaning up
Not available.

7. Handling and storage

Precautions for safe handling
Do not breathe dust. Do not get in eyes, on skin, on clothing. Use only with adequate ventilation.

Conditions for safe handling, including any incompatibilities

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAOLIN (CAS 1332-58-7)</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE (CAS 13463-67-7)</td>
<td>PEL</td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.3 mg/m3</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>
US. OSHA Table Z-3 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4 mppcf</td>
<td>Respirable.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAOLIN (CAS 1332-58-7)</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAOLIN (CAS 1332-58-7)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
<td>Respirable dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Total</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Exposure guidelines
Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) 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. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment
Eye/face protection
Goggles/face shield are recommended.

Hand protection
Wear protective gloves.

Skin protection
Other
Wear appropriate clothing to prevent any possibility of skin contact with solutions containing 10% or more of this chemical.

Respiratory protection
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards
Not available.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
Not available.

Physical state
Solid.

Form
Not available.

Color
Neutral

Odor
Odorless.

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

Flash point
Not available.

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.
Explosive limit - lower (\%)
Not available.
Explosive limit - upper (\%)
Not available.
Vapor pressure
Not available.
Vapor density
Not available.
Relative density
Not available.
Solubility(ies)
Solubility (water)
Insoluble
Partition coefficient (n-octanol/water)
Not available.
Auto-ignition temperature
400 °F (204.44 °C) estimated
Decomposition temperature
Not available.
Viscosity
Not available.
Other information
Specific gravity
0.31 estimated

10. Stability and reactivity
Reactivity
Not available.
Chemical stability
Material is stable under normal conditions.
Possibility of hazardous reactions
Not available.
Conditions to avoid
None under normal conditions.
Incompatible materials
Strong oxidizing agents. Hydrogen fluoride.
Hazardous decomposition products
Oxides of silicon.

11. Toxicological information
Information on likely routes of exposure
Ingestion
Not available.
Inhalation
May cause cancer by inhalation.
Skin contact
Not available.
Eye contact
Harmful in contact with eyes.
Symptoms related to the physical, chemical and toxicological characteristics
Not available.
Information on toxicological effects
Acute toxicity
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Hydroxide (CAS 21645-51-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Oral</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>1100 mg/kg</td>
</tr>
<tr>
<td>KAOLIN (CAS 1332-58-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Dermal</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>SILICON DIOXIDE (AMORPHOUS) (CAS 7631-86-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Oral</td>
<td>Mouse</td>
<td>&gt; 15000 mg/kg</td>
</tr>
</tbody>
</table>
### Test Results

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rat</td>
<td>&gt; 22500 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

### Skin corrosion/irritation
Not available.

### Serious eye damage/eye irritation
Harmful in contact with eyes. None known.

### Respiratory or skin sensitization

<table>
<thead>
<tr>
<th>Respiratory sensitization</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin sensitization</td>
<td>This material contains a component that is capable of being absorbed through intact skin and that has been shown to cause reproductive and developmental effects in laboratory animals.</td>
</tr>
</tbody>
</table>

### Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

### Carcinogenicity
Hazardous by OSHA criteria. Hazardous by WHMIS criteria. In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) Cancer Hazard. In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBON BLACK (CAS 1333-86-4)</td>
<td>2B Possibly carcinogenic to humans.</td>
</tr>
<tr>
<td>Iron Oxide (CAS 1309-37-1)</td>
<td>3 Not classifiable as to carcinogenicity to humans.</td>
</tr>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>1 Carcinogenic to humans.</td>
</tr>
<tr>
<td>SILICON DIOXIDE (AMORPHOUS) (CAS 7631-86-9)</td>
<td>3 Not classifiable as to carcinogenicity to humans.</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE (CAS 13463-67-7)</td>
<td>2B Possibly carcinogenic to humans.</td>
</tr>
</tbody>
</table>

US. National Toxicology Program (NTP) Report on Carcinogens

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>Known To Be Human Carcinogen.</td>
</tr>
</tbody>
</table>

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### Reproductive toxicity
Not classified.

### Specific target organ toxicity - single exposure
Not available.

### Specific target organ toxicity - repeated exposure
Not available.

### Aspiration hazard
Not available.

### Chronic effects
Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

### Further information
This product has no known adverse effect on human health.

### 12. Ecological information

#### Ecotoxicity
Not expected to be harmful to aquatic organisms.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE (CAS 13463-67-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna) &gt; 1000 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Mummichog (Fundulus heteroclitus) &gt; 1000 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

### Persistence and degradability
Not available.

### Bioaccumulative potential
Not available.

### Mobility in soil
Not available.

### Other adverse effects
Not available.
13. Disposal considerations

Disposal instructions
Dispose in accordance with all applicable regulations.

Hazardous waste code
Not regulated.

Waste from residues / unused products
Not available.

Contaminated packaging
Not available.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not available.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

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

US. Massachusetts RTK - Substance List
ALUMINIUM OXIDE (CAS 1344-28-1)
CARBON BLACK (CAS 1333-86-4)
Iron Oxide (CAS 1309-37-1)
KAOLIN (CAS 1332-58-7)
QUARTZ (CAS 14808-60-7)
SILICON DIOXIDE (AMORPHOUS) (CAS 7631-86-9)
TITANIUM DIOXIDE (CAS 13463-67-7)

US. New Jersey Worker and Community Right-to-Know Act
ALUMINIUM OXIDE (CAS 1344-28-1) 500 LBS
US. Pennsylvania RTK - Hazardous Substances
ALUMINIUM OXIDE (CAS 1344-28-1)
CARBON BLACK (CAS 1333-86-4)
Iron Oxide (CAS 1309-37-1)
KAOLIN (CAS 1332-58-7)
QUARTZ (CAS 14808-60-7)
SILICON DIOXIDE (AMORPHOUS) (CAS 7631-86-9)
TITANIUM DIOXIDE (CAS 13463-67-7)

US. Rhode Island RTK
ALUMINIUM OXIDE (CAS 1344-28-1)

US. California Proposition 65

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
CARBON BLACK (CAS 1333-86-4) Listed: February 21, 2003
QUARTZ (CAS 14808-60-7) Listed: October 1, 1988
TITANIUM DIOXIDE (CAS 13463-67-7) Listed: September 2, 2011

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

United States & Puerto Rico  Toxic Substances Control Act (TSCA) Inventory  Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 01-27-2015
Revision date 01-19-2016
Version # 02
Further information  HMIS® is a registered trade and service mark of the NPCA.
References
ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control Law, Executive Order No. 19203)
Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances Safety Management Act No. 18406, Schedule 1)
Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 29)
Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 30)
Korea. Observational Chemicals (Ministerial Decree of TCCL Article 6)
Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor (MOL) Public Notice No. 1986-45, as amended)
Korea. Prohibited Chemical Substances (TCCL Article 11)
Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as amended)
Korea. Restricted Chemical Substances (TCCL Article 11)
Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI)
Korea. Toxic Chemical Control Law (TCCL), pre-1997 List
Korea. Toxic Chemicals (TCCL Article 10)
Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14)
Taiwan. Dangerous Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)
Taiwan. Industrial Precursor Chemicals (Categories and Regulations Governing Inspection and Declaration of Industrial Precursor Chemicals, MOEA Decree No. 87, as amended)
Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials)
Taiwan. Toxic Chemical Substances (TCS) (List of Toxic Chemical Substances announced by the Environmental Protection Administration)
Taiwan. Toxic Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)
HSDB® - Hazardous Substances Data Bank
JIS Z 7250: 2005 Safety data sheet for chemical products-Part 1:Content and order of sections
JCIA GHS Guideline, October 2008
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information
Composition / Information on Ingredients: Disclosure Overrides
Physical & Chemical Properties: Multiple Properties
Toxicological Information: Toxicological Data
Ecological Information: Ecotoxicity