

Armstrong Flooring™

Empower™ Rigid Core Flooring

Safety Data Sheet

Issue date: 11/30/2021 Version: 1.1

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Article

Product Name: Empower™ Rigid Core Flooring

Trade Name/Synonyms: Reinforced mineral core flooring plank

1.2. Intended Use of the Product

Use of the substance/mixture: Flooring product produced for residential use

1.3. Name, Address, And Telephone of The Responsible Party

Armstrong Flooring, Inc.

1740 Hempstead Rd.

Lancaster, PA 17601

USA

1-800-233-3823

www.floorexpert.com

1.4. 24-Hr Emergency Telephone Number

CHEM-TEL: 1-800-255-3924 or +01-813-248-0585 (call collect)

SECTION 2: HAZARD(S) IDENTIFICATION

HAZARDS DISCLOSURE: This product is considered an article in its final form and is not classified as hazardous under the criteria laid forth in the Federal OSHA Hazard Communication Standard 2012 [29 CFR 1910.1200]. Under normal conditions, this product does not release hazardous materials after installation. The product's reinforced mineral core is comprised of naturally occurring substances that contain varying quantities of quartz (crystalline silica). Sawing, sanding, and machining this product produces respirable dust (particles less than 10 micrometers in aerodynamic diameter), which may include respirable crystalline silica (RCS). Other forms of RCS (e.g., tridymite and cristobalite) may also be present.

2.1. GHS Hazard Classification for Respirable Crystalline Silica

CARCINOGENICITY – Category 1A

SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE; RESPIRATORY TRACT IRRITATION – Category 3

SPECIFIC TARGET ORGAN TOXICITY, REPEATED EXPOSURE – Category 1A

2.2. GHS Label Elements for Respirable Crystalline Silica

Hazard Pictograms:



Signal Word: Danger

Hazard Statements:

(H350) May cause CANCER (inhalation)

(H335) May cause respiratory irritation

(H372) Causes damage to organs (lung/respiratory) through prolonged or repeated exposure (inhalation)

Precautionary Statements:

Do not handle until all safety precautions have been read and understood. (P202)

Do not breath dust/spray. (P260 + P261)

Wash skin thoroughly after handling. (P264)

Do not eat, drink, or smoke when using this product. (P270)

Wear protective gloves, protective clothing, eye protection, face protection. (P280)

2.3. Other Hazards

Other Hazards: Cutting, sawing, grinding, or other operations that generate dust may raise nuisance particles that can cause mechanical irritation to the skin, eyes, or respiratory tract. Take necessary measures to limit dust production and follow applicable regulations.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance/Mixture

Component	CAS #	Estimated % by Weight
Crystalline silica (Quartz)	14808-60-7	<1.5

Any concentration shown as a range is due to naturally occurring variations in the mineral complex. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: FIRST AID MEASURES

4.1. Description of Necessary First Aid Measures

General:	If exposed or concerned, get medical advice/attention.
Inhalation:	Dust: If breathing becomes difficult, remove victim to fresh air. Administer artificial respiration if breathing has stopped. Keep victim at rest. Seek medical attention immediately.
Skin Contact:	Dust: Wash thoroughly with soap and water. Seek medical attention if symptoms develop or persist.
Eye Contact:	Dust: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Seek medical attention if irritation develops or persists.
Ingestion:	Dust: Rinse mouth with plenty of water. Do not induce vomiting. Never administer diluents (water or milk) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical attention immediately.

4.2. Most Important Symptoms/Effects, acute and delayed

Inhaling dust may cause discomfort in the chest, shortness of breath, and coughing. Prolonged inhalation may cause chronic health effects. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica liberated from this product can cause silicosis and may cause cancer.

4.3. Indication of Immediate Medical Attention and Special Treatment Needed, if necessary

Notes to physician: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Specific treatments: Not applicable

Protection of first aiders: Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

General information: Pre-existing medical conditions that may be aggravated by exposure include disorders of the eyes, skin, and lungs (including asthma and other breathing disorders). If addicted to tobacco, smoking will impair the ability of the lungs to clear themselves of dust.

See toxicological information (Section 11)

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide, regular dry chemical, regular foam, water spray.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising from the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Take necessary measures to limit dust production and follow applicable regulations.

Reactivity: Contact of crystalline silica dust with powerful oxidizing agents may cause fire and/or explosions (see Section 10 of SDS).

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including a Self-Contained Breathing Apparatus and eye protection.

Other information: Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Avoid actions that cause dust to become airborne. Avoid inhalation of dust. Wear appropriate personal protective equipment as described in Section 8.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

6.2. Environmental Precautions

Avoid discharge of fine particulate matter into drains or water courses.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Collect and contain any material exposed to dust generation.

Methods for Cleaning Up: Shovel or vacuum spilled material. Do not dry sweep or use compressed air for clean-up. Wetting of spilled material be necessary.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Protective measures: Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Avoid dusty conditions and provide appropriate exhaust ventilation. Do not breathe dust. Avoid prolonged exposure.

Wear appropriate personal protective equipment.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Promptly remove dusty clothing and launder before reuse.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in original packaging away from open flame and incompatible materials.

Incompatible Products: Strong bases. Strong oxidizers. Strong acids.

7.3. Specific End Use(s)

Flooring

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

The final product is considered an article and not hazardous in its final form under normal conditions of use according to 29 CFR 1910.1200 (2012). When sanding, sawing, or machining this product, minimize dust generation and accumulation. Follow all applicable exposure limits.

8.2 Component Exposure Limit

Ingredient Name	Exposure Limits
Particulates not otherwise classified (CAS SEQ250)	ACGIH TLV TWA: 3 mg/m ³ – Form: Respirable particles TWA: 10 mg/m ³ – Form: Inhalable particles OSHA PEL PEL: 5 mg/m ³ – Form: Respirable fraction PEL: 15 mg/m ³ – Form: Total Dust TWA: 5 mg/m ³ – Form: Respirable fraction TWA: 15 mg/m ³ – Form: Total dust
Crystalline Silica (Quartz)	ACGIH TLV TWA: 0.025 mg/m ³ – Form: Respirable fraction OSHA PEL TWA: 0.3 mg/m ³ – Form: Total dust TWA: 0.05 mg/m ³ – Form: Respirable fraction NIOSH REL TWA: 0.05 mg/m ³ – Form: Respirable fraction

8.3 Appropriate Engineering Controls

When sanding, sawing, or machining this product, adequate ventilation should be maintained to ensure exposure levels are maintained below the occupational exposure limits listed above. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to limit airborne levels.

8.4 Exposure Guidelines

OSHA PELs and ACGIH TLVs are 8-hr TWA values. NIOSH RELs are for TWA exposures up to 10-hr/day and 40-hr/wk. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

8.5 Individual Protection Measures

Eyes/Face Protection: Wear safety glasses as appropriate where contact with dust is possible. If necessary, refer to US OSHA 29 CFR 1910.133 or appropriate Canadian standards.

Skin Protection: Wear appropriate clothing to prevent skin contact with dust (e.g. overalls).

Glove recommendations: Wear gloves as appropriate to reduce skin contact.

Respiratory protection: When handling or performing work that produces dust or respirable crystalline silica in excess of applicable exposure limits, wear a NIOSH-approved respirator that is properly fitted and is in good condition. Respirators must be used in accordance with all applicable workplace regulations.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Varies
Odor	: None
Odor Threshold	: No data available
pH	: No data available
Relative Evaporation Rate (butylacetate=1)	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available

9.2. Other Information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Hazardous reactions will not occur under normal conditions.

10.2 Chemical Stability: Stable at standard temperature and pressure.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4 Conditions to Avoid: Temperatures capable of producing combustion. Incompatible materials.

10.5 Incompatible Materials: Strong bases. Strong oxidizers. Strong acids.

10.6 Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Hydrogen chloride. Toxic gases. Phosgene.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: No information available for the product. See component data.

Component Analysis: Crystalline Silica Dust

Irritation/Corrosion: Skin: May cause irritation through mechanical abrasion. This product is not expected to be a skin hazard.

Eyes: Direct contact with eyes may cause temporary irritation through mechanical abrasion.

Inhalation: Repeated inhalation of respirable crystalline silica (quartz) may cause silicosis, a fibrosis (scarring) of the lungs. Silicosis is irreversible and may be fatal. Silicosis increases the risk of

contracting pulmonary tuberculosis. Some studies suggest that repeated inhalation of respirable crystalline silica may cause other adverse health effects including lung and kidney cancer.

Ingestion: Not likely due to product form. However, accidental ingestion may cause discomfort.

Symptoms related to physical, chemical, and toxicological characteristics: Discomfort in chest. Shortness of breath. Coughing.

Carcinogenicity: Respirable crystalline silica has been classified by IARC and NTP as a known human carcinogen and classified by ACGIH as a suspected human carcinogen.

OSHA: Not listed

IARC: 1 – Carcinogenic to humans

ACGIH: A2

NTP: Known to be human Carcinogen

Specific Target Organ Toxicity: Acute exposure to respirable crystalline silica via inhalation is not reported to have effects.

Specific Target Organ Toxicity: Chronic exposure to respirable crystalline silica via inhalation may cause damage to organs (lungs) through prolonged or repeated exposure.

Potential chronic health effects: Prolonged inhalation of respirable crystalline silica may be harmful. May cause damage to organs (lungs) through prolonged or repeated exposure. There are reports in the literature suggesting that excessive crystalline silica exposure may be associated with autoimmune disorders and other adverse health effects involving the kidney. In particular, the incidence of scleroderma (thickening of the skin caused by swelling and the thickening of fibrous tissue) appears to be higher in silicotic individuals. To date, the evidence does not conclusively determine a causal relationship between silica exposure and these adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecotoxicity

Not expected to be harmful to aquatic organisms. Discharging sand and gravel dust and fines into waters may increase total suspended particulate (TSP) levels that can be harmful to certain aquatic organisms.

Persistence and degradability: No information available for the product.

Bioaccumulation: No information available for the product.

Mobility: No information available for the product.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal Methods

Do not allow fine particulate matter to drain into sewers/water supplies. Do not contaminate ponds, waterways, or ditches with fine particulates. Dispose of contents in accordance with local/regional/national/international regulations.

13.2 Hazardous Waste Code: Not regulated

13.3 Waste from residues/unused products: Dispose of contents in accordance with local/regional/national/international regulations.

13.4 Contaminated Packaging: Dispose of contents in accordance with local/regional/national/international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 DOT Classification: Not regulated as a hazardous material.

14.2 IMDG: Not regulated.

14.3 IATA: Not regulated.

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

OSHA Hazard Communication Standard, 29 CFR 1910.1200: Not classified.

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

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

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

Clean Air Act Section 112 (b): Hazardous Air Pollutants (HAPs): Not regulated.

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

Safe Drinking Water Act (SDWA): Not regulated.

SARA 313 (TRI): Not regulated.

15.2 SARA 311/312

Name	CAS RN	Wt. %	Acute Health	Chronic Health	Fire	Pressure	Reactive
Crystalline silica (quartz)	14808-60-7	<1.5	No	Yes	No	No	No

15.3 US State Regulations

The following components appear on one or more of the following State RTK lists:

Component	CAS RN	Massachusetts	New Jersey	Pennsylvania	Rhode Island
Crystalline silica (quartz)	14808-60-7	Yes	Yes	Yes	No

California Prop. 65:

 **WARNING:** This product can expose you to chemicals, including crystalline silica, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

15.4 International Regulations

Component	CAS RN	TSCA	Canada	WHMIS	EEC
Crystalline silica (quartz)	14808-60-7	Yes	DSL	D2A	EINECS

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

- Revision date : 11/30/2021
- Data Sources : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
- Other Information : Reasonable care has been taken in the preparation of this information; however, the manufacturer makes no warranty whatsoever including the warranty of merchantability, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental, consequential, or other such damages resulting from its use or misuse. Disclaimer: Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Abbreviations

ACGIH — American Conference of Governmental Industrial Hygienists
CAS — Chemical Abstract Service
CERCLA — Comprehensive Emergency Response and Comprehensive Liability Act
CFR — Code of Federal Regulations
DOT — Department of Transportation
GHS — Globally Harmonized System
HEPA — High Efficiency Particulate Air
IATA — International Air Transport Association
IARC — International Agency for Research on Cancer
IMDG — International Maritime Dangerous Goods
NIOSH — National Institute of Occupational Safety and Health
NOEC — No Observed Effect Concentration
NTP — National Toxicology Program
OSHA — Occupational Safety and Health Administration
PEL — Permissible Exposure Limit
REL — Recommended Exposure Limit
RQ — Reportable Quantity
SARA — Superfund Amendments and Reauthorization Act
SDS — Safety Data Sheet
TLV — Threshold Limit Value
TPQ — Threshold Planning Quantity
TSCA — Toxic Substances Control Act
TWA — Time-Weighted Average
UN — United Nations