



SAFETY DATA SHEET

Section 1. Identification

Product Name:	PermChip
Chemical Name:	
Synonyms:	None
Supplier's Details:	SEK-Surebond Corporation 3925 Stern Avenue St. Charles, IL 60174 (800) 932-3343 www.sek.us.com
Emergency Telephone Number:	CHEMTREC (800) 424-9300 (United States Only)
Chemtrec (outside USA):	(703) 527-3887

Section 2. Hazards Identification

Hazard Classification:

OSHA/HCS Status:

This product contains one or more chemicals considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Physical Hazards:

NA

Health Hazards:

CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY - Category 2
REPEATED EXPOSURE
SKIN CORROSION/SKIN IRRITATION - Category 2
EYE DAMAGE/IRRITATION – Category 2A

GHS Label Elements:

Hazard Pictograms:



Signal Word: Danger

Hazard Statements:

- May cause cancer.
- May cause damage to organs (lungs) through prolonged or repeated exposure.
- Causes skin irritation.
- Causes serious eye irritation.

Precautionary Statements:

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash any exposed body parts. Wear protective gloves/protective clothing/eye protection/face protection.

Response:

If exposed or concerned: Get medical advice/attention. If on skin: wash with plenty of water. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do.

Storage:

Store in a dry area.

Disposal:

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

Other hazards:

None known

Supplemental Information:

Respirable Crystalline Silica (RCS) may cause cancer. Granite is a naturally occurring mineral complex that contains varying quantities of quartz (crystalline silica). In its natural bulk state, granite is not a known health hazard. Granite may be subjected to various natural or mechanical forces that produce small particles (dust) which may contain Respirable Crystalline Silica (particles less than 10 micrometers in aerodynamic diameter). Repeated inhalation of Respirable Crystalline Silica (quartz) may cause lung cancer according to IARC and NTP; ACGIH states that it is a suspected cause of cancer. Other forms of RCS (e.g. tridymite and cristobalite) may also be present or formed under certain industrial processes.

Section 3. Composition/Information on Ingredients

Substance/Mixtures:	Mixture
Chemical Nature:	
Other Means of Identification:	SEK-Surebond PermChip
<u>CAS number/other identifiers:</u>	
CAS Number:	Mixture

Ingredient Name	CAS-No.	%
Granite	None	>99
Crystalline Silica (Quartz)	14808-60-7	>1

Any concentration shown as a range is to protect confidentiality or is due to process variation. 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. These materials are mined from the earth. Trace amounts of naturally occurring elements might be detected during chemical analysis of these materials.

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

Section 4. First Aid Measures

Description of Necessary First Aid Measures:

Eye Contact:

Dust: Immediately flush with plenty of water for at least 15 minutes while holding eyelid(s) apart. Remove contacts if present and easy to do. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Get medical attention if irritation develops or persists.

Inhalation:

Dust: Move to fresh air. Get medical attention if symptoms develop or persist.

Skin Contact:

Dust: Wash off with soap and water. Get medical attention if irritation develops and persists.

Ingestion:

Dust: Rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

Most Important Symptoms/Effects (both acute and delayed):

Inhaling dust may cause discomfort in 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.

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 the 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 eye, skin and lung (including asthma and other breathing disorders). If addicted to tobacco, smoking will impair the ability of the lungs to clear themselves of dust.

Section 5. Firefighting Measures

General Fire Hazards: Not applicable.

Extinguishing Media:

Suitable Extinguishing Media: Not flammable. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media: None known.

Special hazards arising from the substance or mixture:

No unusual fire or explosion hazards noted. Not a combustible dust.

Hazardous thermal Decomposition:

None known.

Special Protective Equipment for Firefighters:

Use protective equipment appropriate for surrounding materials. No specific precautions. Contact with powerful oxidizing agents may cause fire and/or explosions (see Section 10 of SDS). No unusual fire or explosion hazards.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate personal protective equipment and clothing during clean-up of materials that contain or may liberate dust.

Methods and Materials for Containment and Cleaning Up:

Spilled material, where dust is generated may overexpose cleanup personnel to Respirable Crystalline Silica-containing dust. Do not dry sweep or use compressed air for clean-up. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Avoid discharge of fine particulate matter into drains or water courses.

Section 7. Handling and Storage

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. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment.

Conditions for Safe Storage, Including any Incompatibilities:

Avoid dust formation or accumulation.

Section 8. Exposure Controls/Personal Protection

Control Parameters:

Occupational Exposure Limits

- 1 – Value equivalent to OSHA formulas (29 CFR 1910.1000; 29 CFR
- 2 – Value also applies to MSHA metal/Non-Metal (1973 TLVs at 30 CFR 56/57.5001)
- 3 – OSHA enforces 0.250 mg/m³ in construction and shipyards (CPL-03-00-007)
- 4 – Value also applies to OSHA construction (29 CFR 1926.55 Appendix A) and shipyards (29 CFR 1915.1000 Table Z)
- 5 – MSHA limit = 10 mg/m³

Ingredient Name	Exposure Limits
Particles not otherwise classified	ACGIH TLV (United States, 3/2012) TWA: 3 mg/m ³ . Form: Respirable particles (2) TWA: 10 mg/m ³ . Form: Inhalable particles (2) OSHA PEL (United States, 6/2010) PEL: 5mg/m ³ . Form: Respirable fraction PEL: 15 mg/m ³ . Form: Total dust(4) TWA: 5mg/m ³ . Form: Respirable fraction (1) TWA: 15mg/m ³ . Form: Total dust (1, 4, 5)
Crystalline Silica (Quartz) (CAS 14808-60-7)	OSHA PEL (United States, 6/2010) TWA: 0.3 mg/m ³ . Form: Total dust (1,2) TWA: 0.1 mg/m ³ . Form: Respirable (1,2,3)
Crystalline Silica (all forms CAS mixture)	ACGIH TLV (United States,3/2012) TWA: 0.025 mg/m ³ . Form: Respirable fraction NIOSH REL (United States,6/2009) TWA: 0.05 mg/m ³ . Form: Respirable dust

Exposure Controls:

Appropriate Engineering Controls:

Good ventilation (typically 10 air changes per hour indoors) 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.

Exposure Guidelines:

OSHA PELs, MSHA 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. Terms including “Particulates Not Otherwise Classified,” “Particulates Not Otherwise Regulated,” “Particulates Not Otherwise Specified,” and “Inert or Nuisance Due” are often used interchangeably; however, the user should review each agency’s terminology for differences in meanings.

Biological limit values:

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

Individual Protection Measures, Such As Personal Protective Equipment:

Hygiene Measures:

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.

Eye/Face Protection:

Wear safety glasses with side shields (or goggles).

Hand Protection:

Use personal protective equipment as required.

Body Protection:

Use personal protective equipment as required.

Other Skin Protection:

Use personal protective equipment as required.

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.

Thermal Hazards:

Not anticipated. Wear appropriate thermal protective clothing if necessary.

Section 9. Physical and Chemical Properties

Information on Basic Physical and Chemical Properties:

Appearance:	
Physical State:	Solid, particles of granular mixture
Color:	Various colors
Odor:	Not applicable
Odor Threshold:	Not applicable
pH:	No data available
Melting Point/Freezing Point:	Not applicable
Initial Boiling Point & Range:	Not applicable
Flash Point:	Non-combustible
Burning Time:	Not applicable
Evaporation Rate:	Not applicable
Flammability (solid, gas):	Not applicable
Upper Explosion Limit:	Not applicable
Lower Explosion Limit:	Not applicable
Vapor Pressure:	Not applicable
Relative Vapor Density:	Not applicable
Relative Density:	Not available
Solubility:	
Solubility in Water:	Insoluble
Partition coefficient (n-octanol/water):	Not applicable
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	Not applicable
SADT:	Not available
Viscosity:	Not applicable

Section 10. Stability and Reactivity

Reactivity:	This product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability:	Material is stable under normal conditions.
Possibility of Hazardous Reactions:	No dangerous reaction known under conditions of normal use.
Conditions to Avoid:	Avoid contact with strong oxidizing agents.
Incompatible Materials:	Crystalline Silica may react violently with strong oxidizing agents, causing fire and explosions.
Hazardous Decomposition Products:	None expected.

Section 11. Toxicological Information

Information on Toxicological Effects:

Acute Toxicity:

Not expected to be acutely toxic.

Irritation/Corrosion:

Skin: Dust 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.

Sensitization:

Respiratory sensitization: No respiratory sensitizing effects known.

Skin sensitization: Not known to be a dermal irritant or sensitizer.

Mutagenicity:

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

Aspiration Hazard:

Not expected to be an aspiration hazard.

Reproductive toxicity:

Not expected to be a reproductive hazard.

Symptoms related to physical, chemical and toxicological characteristics:

Dust can cause discomfort in chest, shortness of breath and/or 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.

Product/Ingredient Name	OSHA	IARC	ACGIH	NTP
Crystalline Silica (Quartz) CAS 14808-60-7)	Not listed	1 Carcinogenic to humans	A2	Known to be human carcinogen
Respirable Tridymite and Cristobalite (other forms of crystalline) (CAS Mixture)	Not listed	1 Carcinogenic to humans	-	-

Specific target organ toxicity (acute exposure):

Name	Category	Route of Exposure	Target Organs
Crystalline Silica (Quartz) CAS 14808-60-7)	-	Inhalation	Not reported to have effects.
Respirable Tridymite and Cristobalite (other forms of crystalline) (CAS Mixture)	-	Inhalation	Not reported to have effects.

Specific target organ toxicity (chronic exposure):

Name	Category	Route of Exposure	Target Organs
Crystalline Silica (Quartz) CAS 14808-60-7)		Inhalation	May cause damage to organs (lung) through prolonged or repeated exposure.
Respirable Tridymite and Cristobalite (other forms of crystalline) (CAS Mixture)		Inhalation	May cause damage to organs (lung) through prolonged or repeated exposure.

Potential chronic health effects:

General: 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

EcoToxicity:

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

Persistence and degradability: Not applicable.
Bioaccumulative potential: Not applicable.
Mobility in soil: Not applicable.
Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, global warming potential) are expected from this component.

Section 13. Disposal Considerations

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.

Hazardous Waste Code:

Not regulated.

Waste from residues/unused product:

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated Packaging:

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty packaging materials should be recycled or disposed of in accordance with applicable regulations and practices.

Section 14. Transport Information

	DOT Classification	IMDG	IATA
UN Number	Not regulated.	Not regulated.	Not regulated.
UN Proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	-	-	-
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

Section 15. Regulatory Information

U.S. Federal regulations:

OSHA Hazard Communication Standard, 29 CFR 1910.1200:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

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 311/312

Classification: Delayed (chronic) health hazard.

Composition/Information on Ingredients:

Name	%	Fire Hazard	Sudden Release of Pressure	Reactive	Immediate (acute) Health Hazard	Delayed (chronic) Health Hazard
Crystalline Silica (Quartz) CAS 14808-60-7	>1	No	No	No	No	Yes

SARA 313 (TRI)

	Product Name	CAS Number	%
Form R-Report Requirements	Crystalline Silica (Quartz)	14808-60-7	Not regulated

STATE REGULATIONS:

Massachusetts RTK: The following components are listed: Crystalline Silica (Quartz) (CAS 14808-60-7), Respirable Tridymite and Cristobalite (other forms of Crystalline Silica) (CAS Mixture)

New Jersey RTK: The following components are listed: Crystalline Silica (Quartz) (CAS 14808-60-7), Respirable Tridymite and Cristobalite (other forms of Crystalline Silica) (CAS Mixture)

Pennsylvania RTK: The following components are listed: Crystalline Silica (Quartz) (CAS 14808-60-7), Respirable Tridymite and Cristobalite (other forms of Crystalline Silica) (CAS Mixture)

Rhode Island RTK: Not regulated.

California Prop. 65:

WARNING: This product contains crystalline silica and chemicals (trace metals) known to the State of California to cause cancer.

Ingredient Name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Crystalline Silica (Quartz) CAS 14808-60-7	Yes	No	No	No

International Regulations:

Ingredient Name	CAS #	TSCA	Canada	WHMIS	EEC
Crystalline Silica (Quartz)	14808-60-7	Yes	DSL	D2A	EINECS

WHMIS Classification:

D2A “Materials Causing Other Toxic Effects”



Section 16. Other Information

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
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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

Revision Information: Not relevant.

**Key Literature References
and Sources for Data:** No data available.

Training Information: No data available.

Date of Issue/Date of Revision: 11/16/2015

Notice to Reader

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