



IONE MINERALS, INC.

SAFETY DATA SHEET / MATERIAL SAFETY DATA SHEET

Revised: 05/05/2015

1. Product and Company Identification

Product Name: GREENSTRIPE CLAY

Manufacturer/Supplier: Ione Minerals
8631 State Highway 124
PO Box 785
Ione, CA 95640
Phone: (209) 274 – 2471 **Fax:** (209) 274-4102

Common Name Synonyms: Clay, Fireclay, Kaolin, Kaolinite

Material Uses: Used in ceramics, adhesives and stucco

In case of emergency call: Chemtrec: 1-800-424-9300 Outside US: +1-703-527-3887
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2. Hazard(s) Identification

Hazard Classification: **WARNING!** Cancer Hazard. Contains quartz which can cause cancer. Risk of cancer depends upon duration and level of exposure. Not an acute hazard. May cause mechanical eye or skin irritation in high concentrations. Prolonged inhalation may cause lung injury.

Signal Word: **WARNING!**

Hazard / Precautionary Statement:

Medical conditions aggravated by exposure to the product: Asthma, chronic lung disease, and skin irritation

Carcinogenicity information: Crystalline silica is listed by IARC as a Group 1 Carcinogen "sufficient evidence of carcinogenicity in humans", and is listed by NTP as K, "Known To Be A Human Carcinogen".

Information pertaining to particular dangers for man and environment: May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure.

PRODUCT CONTAINS CRYSTALLINE SILICA, "a chemical known to the State of California to cause cancer." Prolonged or repeated inhalation of dust from products containing crystalline silica can cause silicosis or cancer.



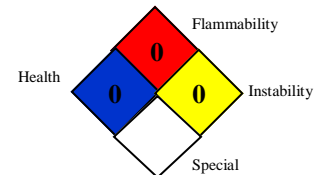
Description of Hazards not Otherwise Classified:

Can cause mechanical irritation to eyes and skin

Hazardous Material Information System (U.S.A.)

Health	*	0
Flammability		0
Physical Hazards		0
Personal Protection		E

* Chronic Potential



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3. Composition / Information on Ingredients

Substances:

Chemical Name:	Hydrous Alumina Silicate	
Common Name Synonyms:	Kaolin Clay and some quartz	
Chemical Abstracts Services (CAS):	Kaolin #1332-58-7	Quartz #14808-60-7
Impurities and Stabilizing Additives:	None	

Mixtures:

Mixture of the substances listed below with nonhazardous additions		
Hydrous Alumina Silicate	1332-58-7	80 – 100%
Crystalline Silica (Quartz)	14808-60-4	10 – 20%

Chemicals where a trade secret is claimed: N / A

4. First Aid Measures

Eye Contact	Flush open eye with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
Skin Contact	Immediately wash with soap and water. Rinse thoroughly.
Inhalation	If high concentration is inhaled and mechanical irritation or discomfort occurs, allow victim to rest in a well ventilated area. Seek medical attention if irritation persists.
Ingestion	This product is intended for industrial applications; in the unlikely event that this product is swallowed, consult a physician if any adverse medical conditions occur.

5. Fire Fighting Measures

Flammability of the Product	Non-Flammable
Flash Point	Not Applicable
Auto-Ignition Temperature	Not Applicable
Hazardous Combustion Products	Not Applicable
Fire Hazards in the Presence Of Various Substances	Not considered to be flammable. Product will not burn, use appropriate extinguishing media for surrounding fires.
Suitable Extinguishing Agents	Use fire-fighting measures that suit the environment.
Protective Equipment	No special measures required.

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6. Accidental Release Measures

Small Spill	Use a vacuum to clean up spillage. If appropriate, use gentle water spray to wet down and minimize dust generation. Place in a sealed container.
Large Spill	Use a shovel to put the clay into a convenient waste disposal container. Finish cleaning by spreading water on the remaining clay dust and dispose of according to local and regional authority requirements. Avoid excessive dust generation. Use respiratory protection in high dust conditions.

7. Handling and Storage

Handling

Precautions for Safe Handling

Avoid generating dust. Use respiratory protection when any dust is created. Clean up spills promptly. Handle in ways which minimize dust generation. Ensure good ventilation / exhaust at the workplace. Prevent formation of dust.

Information about Protection Against Explosions and Fires

Keep respiratory protective device available.

Storage

Requirements to be Met by Storerooms and Receptacles

No special requirements

Information About Storage in One Common Storage Facility

Not required

Further Information About Storage Conditions

Store product inside, out of extreme weather conditions.

Specific End Use(s)

No further relevant information available.

Storage Class

Class according to regulation on flammable liquids – Not applicable.

8. Exposure Controls and Personal Protection

Additional information about design of technical systems: No further data: see section 7.

Control Parameters

Components with limit values that require monitoring at the workplace:

1332-58-7 hydrous alumina silicate

ACGIH TLV	2 R mg/m3
NIOSH REL	10*; 5** mg/m3 *Total Dust ** Respirable fraction
OSHA PEL	15*; 5** mg/m3 *Total dust ** Respirable fraction




14808-60-7 crystalline silica (quartz)

ACGIH TLV	0.05 R mg/m3
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Trade Name:	GREENSTRIPE CLAY	<i>(Continued from page 3)</i>
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NIOSH REL	0.05* mg/m3 *Total dust
OSHA PEL	Short-term value: 10** mg/m3 Long-term value 30* mg/m3 As SiO2; *Total dust **Respirable dust

<u>Personal Protective Equipment</u>	
	  
General Protective and Hygienic Measures	Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Store protective clothing separately.
Breathing Equipment	NIOSH approved respirators should be used if dust is present. A respiratory protection program should be implemented if exposures exceed OSHA PELs.
Protection of Hands	No special skin protection should be required. However, if irritation is experienced, use gloves and/or other skin covering.
Eye Protection	Safety glasses with side shields recommended.

9. Physical and Chemical Properties

Appearance	
Form	Solid (Powdered Solid)
Color	White to Buff
Odor	No specific odor
Odor Threshold	Not determined
pH-Value	4.5
Change in Condition	
Melting Point / Melting Range	Undetermined
Boiling Point / Boiling Range	Undetermined
Flash Point	Not applicable
Flammability (solid, gaseous)	Non-flammable
Ignition Temperature	Not applicable
Auto Igniting	Product is no selfigniting
Danger of Explosion	Product does not present an explosion hazard
Explosion Limits	
Lower	Not determined
Upper	Not determined
Vapor Pressure	Not available
Density	
Relative Density	2.65 gr/cm ³
Vapor Density	Not applicable
Evaporation Rate	Not applicable

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Solubility in / Miscibility With Water	Insoluble
Viscosity	
Dynamic	Not applicable
Kinematic	Not applicable
Solvent Content	
Organic Solvents	None
Solids Content	None
Other Information	No further relevant information available

10. Stability and Reactivity

Reactivity	No further relevant information available
Chemical Stability	This product is stable
Thermal Decomposition / Conditions to be Avoided	Not applicable
Possibility of Hazardous Reactions	No dangerous reactions known
Conditions to Avoid	No further relevant information available
Incompatible Materials	No further relevant information available
Corrosivity	Not available

11. Toxicological Information

Information on Toxicological Effects	(See Hazards Identification (Section 2))
Acute Toxicity	
LD/LC50 Values that are Relevant for Classification	7631-86-9 silicon dioxide, chemically prepared Oral LD50 10,000 mg/kg (rat)
Primary Irritant Effect	
On the Skin	May have mechanical irritation
On the Eye	May have mechanical irritation
Summary Toxicological Information	CRYSTALLINE SILICA: Overexposure to respirable crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis. "Inhalable" crystalline silica (quartz) is listed by IARC as a Group 1 carcinogen (lung) based on "sufficient evidence" in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Excessive exposure to any dust may aggravate pre-existing respiratory conditions.

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Carcinogenic Categories

IARC (International Agency for Research on Cancer)

Group 1	Carcinogenic to humans
Group 2A	Probably carcinogenic to humans
Group 2B	Possibly carcinogenic to humans
Group 3	Not classifiable as to its carcinogenicity to humans
Group 4	Probably not carcinogenic to humans

14808-60-7 Quartz (S,02) 1

NTP (National Toxicology Program)
14808-60-7 Quartz (S,02) K

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed

12. Ecological Information

Toxicity

Aquatic Toxicity No further relevant information available
Persistence and Degradability No further relevant information available

Behavior in Environmental Systems

Bioaccumulative Potential No further relevant information available
Mobility in Soil No further relevant information available

Additional Ecological Information

General Notes Not known to be hazardous to water

Results of PBT and vPvB Assessment

PBT Not applicable
vPvB Not applicable

Other Adverse Effects At present there are no ecotoxicological assessments

13. Disposal Considerations

Recommendation for Disposal of Product

As sold, this product is not RCRA hazardous. Final used condition must be evaluated prior to disposal. Dispose of waste product in accordance with Federal, State and Local regulations. Dust created during demolition of used product may contain crystalline silica.

Recommendation for Disposal of Uncleaned Packaging

Reuse, recycle or treat as industrial waste.

For further information, please refer to Section 8 (Exposure Controls/Personal Protection) of this SDS.

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14. Transport Information

Land Transport – DOT Bulk or Non-Bulk	Not Regulated
Air Transport (IATA)	Not Regulated
Sea Transport (IMO)	Not Regulated
TDG (Canada)	Not Regulated

15. Regulations

SARA 313 Toxic Chemicals	No material listed in the components in section 2 of this SDS is on the SARA 313 list
SARA 302 Extremely Hazardous Substances	No material listed in the components in section 2 of this SDS is on the SARA 302 list
TSCA (Toxic Substance Control Act)	This substance or all the ingredients of this product are on the Chemical Substances Inventory of the Toxic Substances Control Act (TSCA Inventory). The presence on this list does not require any legal reporting.

WHMIS Classification	
Class D – Division 2 – Sub Division A	Untested mixture containing a very toxic material
Class D - Division 2 – Sub Division B	Untested mixture containing a toxic material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Hazard Symbol(s)	Toxic		
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Hazard-Determine Components of Labeling	Crystalline silica (quartz)
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Risk Phrases	May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure.
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Safety Phrases	When using do not eat or drink. Do not breathe dust. After contact with skin, wash immediately with soap and water. Wear suitable, protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately.
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Special Labeling of Certain Preparations	PRODUCT CONTAINS CRYSTALLINE SILICA “a chemical known to the State of California to cause cancer.” Prolonged or repeated inhalation of dust from products containing crystalline silica can cause silicosis or cancer.
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National Regulations	The following ingredients are known in the State of California to be a cancer risk (Proposition 65): 14808-60-7 crystalline silica (quartz)
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16. Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- ◆ *Creation date:*
02/27/2015