



Safety Data Sheet (SDS)

[1. PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME KuraStone Series
 MANUFACTURER Nichiha Co., Ltd.
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[2. SUMMARY OF HAZARDOUSNESS/HARMFULNESS]

GHS classification

Health harmfulness

- Skin corrosivity/irritation: Classification 1
- Serious eye damage/eye irritation: Classification 1
- Carcinogenicity: Classification 1A
- Specific target organ toxicity (single exposure): Classification 2 (respiratory system),
Classification 3 (airway irritation)
- Specific target organ toxicity (repeated exposures): Classification 2 (respiratory system, lung, kidney)

GHS label element

Symbols



Signal Word: Danger

Hazard Statements

- Serious chemical damage to skin
- Serious eye damage
- Carcinogenicity
- May damage the respiratory system if inhaled.
- May damage the respiratory system or kidneys through long-term or repeated exposures.

Safety measures

- Obtain the instruction manual before use.
- Do not handle the product unless you have read and understood all safety precautions.
- Wash your hands and face thoroughly after handling the product.
- Wear protective gloves, clothes, goggles and mask.
- Do not inhale powder dust.
- Do not eat, drink or smoke while using this product.

First-aid measures

- Inhalation: Move the victim to a place with fresh air and rest in a posture comfortable for breathing.
- Skin contact (including hair): Immediately take off/remove all contaminated clothes. Wash the skin under running water/in a shower.
- Eye contact: Rinse the eye with water carefully for a few minutes. Next, if contact lenses are worn, remove them if easy to remove. Continue washing the eye with water. Immediately seek medical advice/attention.
- When ingested: Wash the mouth. Do not induce vomiting.

- When reusing the contaminated clothes: Wash them prior to use.
- Seek medical attention as needed if exposed to dust or feel sick as a result.

Storage

- Store the product under lock and key.

Disposal

- Follow applicable local, state, and federal construction waste management requirements. Prevent potential dust exposure for others.

[3. COMPONENT/INFORMATION ON INGREDIENTS]

Classification of single product or mixture: Mixture

Ingredients: Cement, sand, inorganic fiber, organic admixture, inorganic admixture

- The product contains approx. 0 to 4% of iron oxide and titanium oxide. Also, the cement may contain up to 2% of calcium oxide and crystalline silica.

NAME	CAS Number	%content
Iron oxide	1309-37-1	0~4%
Titanium oxide	130463-67-7	0~4%
Crystalline silica	14808-60-7	~2%
Calcium oxide	1305-78-8	~2%

- The product does not contain asbestos.
- The product does not contain formaldehydes. Chlorpyrifos has not been added.

[4. FIRST AID]

Eye Contact: Immediately wash the eye for at least 15 minutes using clean water and then seek attention of a doctor.

Skin Contact: Immediately wash the skin thoroughly with water and seek medical attention.

Inhalation: Immediately move to a place with fresh air, gargle with water, and seek medical attention as needed.

Ingestion: Wash the inside of the mouth thoroughly with water and seek medical attention. If the victim is groggy or unconscious, do not induce vomiting, but seek medical attention without delay.

When exposed or potentially exposed to dust: Seek attention/treatment of a doctor.

[5. MEASURES TAKEN IN CASE OF FIRE]

Extinguishing method: Cut off the combustion path to the source of fire and extinguish the fire using water and fire-extinguishing medium. Fight the fire from the upwind side and wear respiratory protection gears if necessary.

Fire-extinguishing media: Water, powder, carbonic acid gas, foam

[6. MEASURES TAKEN IN CASE OF LEAK]

The product is normally in a solid sheet-shaped state, so no special measures are needed. Pay attention to the following in case of leak of powder dust:

Precautions against adverse effects on human health, protective gears and emergency measures:

Wear protective gears such as protective gloves, boots, goggles and dust mask when recovering the powder dust.

Precautions against adverse effects on the environment:

Prevent powder dust from scattering.

Methods and equipment for containment and cleaning:

If powder dust leaks or scatters, recover it using HEPA filter equipped vacuum. Do not dry sweep or use compressed air. Store the recovered powder dust in a container until disposal.

[7. HANDLING AND STORAGE PRECAUTIONS]

- Handling:
- Wear protective gloves (work gloves, etc.) when handling the product.
 - Provide local exhaust measures when cutting the material and use cutting equipment with anti-dust function. Also wear proper protective equipment (anti-dust mask, protective goggles, etc.) so as not to inhale powder dust or let it enter your eyes.
 - Do not wet the product.
 - Rinse your face, hands, mouth, etc., with water after handling the product.

- Clean dust with HEPA filter equipped vacuum. Do not dry sweep or use compressed air.

Storage: Store the product away from water.

[8. MEASURES FOR PREVENTION OF EXPOSURE]

See below if powder dust generates from cutting or otherwise processing the product.

Controlled concentration: $E = 3.0 / (1.19Q + 1)$ (mg/m³)
 (Q: Free silicate content in powder dust)

Allowable concentration:

Japan Society for Occupational Health (2014)

Inhalant crystalline silica	0.03 mg/m ³ (TWA)
Inhalant powder dust	1 mg/m ³ (TWA)
Total powder dust	4 mg/m ³ (TWA)

ACGIH (2006)

Crystalline silica	0.025 mg/m ³ (TWA)
Inhalant powder dust	3 mg/m ³ (TWA)
Total powder dust	10 mg/m ³ (TWA)

OSHA PEL (2015)

Crystalline silica (Quartz) (Action Level)	25 µg/m ³ (TWA)
(Permissible Exposure Limit [PEL])	50 µg /m ³ (TWA)
Calcium Oxide	5 mg/m ³ (TWA)
Iron Oxide	10 mg/m ³ (TWA)
Titanium Oxide	15 mg/m ³ (TWA)

Facility/Engineering Measures: Cut the product outdoors or in a well-ventilated place using a saw with fiber cement saw blades and dust-collecting function. When handling the product indoors, provide a ventilation system, etc., to keep the concentration of airborne dust to the controlled level or below.

Personal Protective Equipment:

- Eyes: Anti-dust goggles compliant with ANSI Z87.1.
- Hands: Protective work gloves, regularly washed.
- Respiratory: Use a properly-fitted N, O, or P 100 respirator when cutting or otherwise abrading product.
- Skin: Select personal protective equipment for the body based on the task being performed.
 Pants, long-sleeve shirts recommended to prevent skin from dust exposure.

[9. PHYSICAL AND CHEMICAL PROPERTIES]

Appearance: Sheet shaped
 Bulk specific gravity: 1.0 or more
 Solubility: Insoluble in water

[10. STABILITY AND REACTIVITY INFORMATION]

Stability/Reactivity:	Stable
Conditions to be avoided:	Not applicable
Mixing hazard:	Not applicable
Hazardous/harmful decomposition products:	Not applicable

[11. INFORMATION ON HARMFULNESS]

Acute toxicity: No data is available.

Skin corrosivity/irritation and serious damage/irritation to eye:

- If product comes into contact with water, it may exhibit strong alkalinity (pH12 to 13) and cause irritation to the eye, nose and skin as well as inflammation to the cornea, tissues inside the nose, and skin.

Respiratory organ sensitization or skin sensitization:

- The cement contains a trace amount of chromium compound and may cause allergic reaction in people sensitive to hexavalent chromium.

Carcinogenicity: No data is available.

- The product is classified under classification 1A because it may contain crystalline silica which is classified under carcinogenicity classification 1A.

Reproductive cell mutagenicity: No data is available.

Reproductive toxicity: No data is available.

Specific target toxicity (single exposure): No data is available.

- The product is classified as specific target toxicity (single exposure) classification 3 (airway irritation) because it may contain iron oxide and titanium oxide that are classified as having specific target toxicity (single exposure).
- The product is classified as specific target toxicity (single exposure) classification 2 (respiratory system) because it contains calcium oxide and crystalline silica that are classified as having specific target toxicity (single exposure).

Specific target toxicity (repeated exposures): The product may cause pneumoconiosis if inhaled in large quantities over a long period of time.

- The product is classified as specific target toxicity (repeated exposures) classification 1 (respiratory system, lung) because it contains iron oxide and titanium oxide that are classified as having specific target toxicity (repeated exposures) in the product.
- The product is classified as specific target toxicity (repeated exposures) classification 2 (respiratory system, kidney) because it may contain calcium oxide and crystalline silica that are classified as having specific target toxicity (repeated exposures) in cement.

[12. INFORMATION ON ENVIRONMENTAL IMPACT]

Environmental impact/bio-toxicity

- Exercise caution to prevent negative environmental impact. Water may exhibit strong alkalinity (pH12 to 13) with prolonged exposure.

Persistence, degradability: No data is available.

Bioaccumulation potential: No data is available.

Migration in soil: No data is available.

Harmfulness to ozone layer: No data is available.

[13. PRECAUTIONS ON DISPOSAL]

Follow all local, state, and federal regulations with respect to construction waste material disposal.

[14. PRECAUTIONS ON TRANSPORT]

Information on codes and classifications under international regulations: Not applicable

Specific safety measures and conditions for transport

- Prevent collapse of cargo, etc., without fail.
- Pay attention to prevent wetting.

[15. REGULATORY INFORMATION]

United States inventory (TSCA) listed items: Quartz – Crystalline Silica (14808-60-7), Calcium Oxide (1305-78-8).

SARA 302/303: No Extremely Hazardous Substances.

SARA 311/312:	Acute	Chronic	Fire	Pressure	Reactive
Crystalline Silica (Quartz)	yes	yes	no	no	no

[16. OTHER INFORMATION]

Cited literatures

- JIS Z 7253: 2012 (Japan)
- Health, Labour and Welfare Ministry's Workplace Safety Site, Information on GHS-compliant Model Labeling/Model SDS (Japan)
- Material SDS

This data sheet has been prepared based on documents, information and data currently available, but the contents, physical/chemical properties, hazardousness information and other values are not guaranteed. Also note that the cautionary instructions assume normal handling, and if the product will be handled in any special manner, implement safety measures appropriate for the specific application/method of use.