

Safety data sheet (SDS)**1. Product and company identification**

[Product identification]

Product name KMEW siding “Neorock” and trim of same nature
 General name Ceramic siding
 Outline of product This product is made of cement and silicates as main raw materials, reinforced with organic fibrous materials and after molding cured in an autoclave.

[Manufacturer identification]

Name of company KMEW Co. Ltd. (Nara Techno Center)
 Address 800 Tsutsuicho, Yamatokoriyama-shi, Nara 639-1188 JAPAN
 Name of section Siding development section
 Person in charge Manager of siding development
 Phone number +81-743-56-9409
 FAX number +81-743-57-9885
 Recommended use and limitation of use Exterior building material (Only Ceratopia series can be used for interior)
 Reference number KMH-BJ-004

2. Hazards identification

GHS classification

Physical and chemical hazards	1. Explosives	: Classification not possible
	2. Flammable gases	: Not applicable
	(Including chemically unstable gases)	
	3. Aerosols	: Not applicable
	4. Combustion support/oxidizing gas	: Not applicable
	5. High pressure gas	: Not applicable
	6. Flammable liquid	: Not applicable
	7. Combustible solid	: Classification not possible
	8. Self-heating substances and mixtures	: Classification not possible
	9. Self-igniting liquid	: Not applicable
	10. Self-igniting solid	: Classification not possible
	11. Self-reactive substances and mixtures	: Classification not possible
	12. Substances and mixtures which, in contact with water, emit flammable gases	: Classification not possible
	13. Oxidizing liquid	: Not applicable
	14. Oxidizing solid	: Classification not possible
	15. Organic peroxide	: Classification not possible
Adverse human health effects	16. Metal-corrosive substance	: Classification not possible
	1. Acute toxicity (Oral)	: Classification not possible
	1. Acute toxicity (Dermal)	: Classification not possible
	1. Acute toxicity (Inhalation: gas)	: Not applicable
	1. Acute toxicity (Inhalation: vapor)	: Classification not possible
	1. Acute toxicity (Inhalation: dust, mist)	: Classification not possible
	2. Skin corrosivity/irritancy	: Classification not possible
	3. Serious eye damaging/irritating property	: Classification not possible
	4. Respiratory or skin sensitizing property	: Classification not possible
	5. Germ cell mutagenicity	: Classification not possible
	6. Carcinogenicity	: Category 1A
	7. Reproductive toxicity	: Classification not possible
	8. Specific target organ toxicity - single exposure	: Category 2 (respiratory system)
	9. Specific target organ toxicity - repeated exposure	: Category 2 (respiratory system, kidney)
	10. Aspiration hazard	: Classification not possible

Environmental hazards	11. Hazardous to the aquatic environment (acute) 11. Hazardous to the aquatic environment (chronic) 12 Hazard to the ozone layer	: Classification not possible : Classification not possible : Classification not possible
GHS label elements Pictogram or symbol		
Signal word	Danger	
Hazards identification	The product is typically solid that liberates dust when cut, ground or bored. Inhalation of suspended dust may cause pneumoconiosis and cancer. Water left in contact with the product for a long time takes on alkalinity, is irritating to eyes, nose and skin and may cause inflammation to cornea of the eye, internal tissue of the nose and skin. Long term or repetition of exposure may cause lesion to organs (lung, kidney and respiratory system).	
Precaution		
Safety measures	When using the product, be sure to obtain the instruction manual, etc. Do not handle the product until having read and understood all the safety precautions. Prepare personal-use protective equipment and ventilation equipment as needed, and use them to avoid exposure. Do not inhale dust, fume, etc. Dust off the clothes by vacuum cleaning after handling the product, and sufficiently wash hands, gargle, etc. Do not eat, drink or smoke during handling the product.	
First-aid measures	- Inhalation Move the victim to fresh air and let the victim take a rest in a posture easy to breathe. - Skin contact Remove extraneous matters. Wash skin with running water. - Eye contact Immediately wash the eye with plenty of running water for several minutes. - Ingestion Remove residue in the mouth and rinse well. If the victim feels sick after handling the product, refer for treatment and examination by a physician.	
Storage	Remove attached dust generated from cutting, grinding and boring operation by vacuum cleaner. For storage, cover unused products with sheeting to avoid wetting.	
Disposal	Dispose of the content and containers in accordance with regulations of the local government, or outsource it to professionals approbated by the prefectural governor.	

3. Composition and components information

Substance/mixture	Mixture
General name	Ceramic siding
Hazardous components	

Chemical name or general name	Crystalline silica
CAS umber	14808-60-7
Content (%)	below 5 - 8 *
Paragraph. (1), Article 75-2 of Industrial Safety and Health Law	312 (silica)
Reference number in gazette list in Japan	(1)-548 silicon dioxide

*Result by the measurement method of KMEW

Composition

Chemical name or general name	Content (%)
Calcium silicate compound	71-96
Inorganic admixture	0-20
Organic filament	3-6
Organic admixture	1-3

Asbestos is not contained.

4. Emergency measures

Inhalation	In the case of dust inhalation, move the victim to fresh air and let the victim gargle with water or warm water, and if there is a symptom, refer to medical attention.
Skin contact	In the case of skin contact with water remained on the product, immediately rinse with water and refer to medical attention as needed.
Eye contact	In case dust entered eyes, immediately wash the eyes sufficiently with clean water. Do not rub the eyes. If pain remains, refer to medical attention.
Ingestion	After having the victim drink plenty of water to vomit, refer to examination by a physician.

5. Fire-fighting measures

Extinguishing media	Plenty of water, ABC extinguisher, powder extinguisher, carbon dioxide extinguisher
Extinguishing media that should not be used	Not applicable
Specific fire disaster	Not applicable
Special Fire-fighting Procedures	Fight fire using plenty of water, extinguishing media. Fight fire from upwind position.
Protection of fire fighters	Wear eye protection, and if needed, self-contained breathing apparatus.

6. Accidental release measures

Accidental release measures	Leakage does not occur because the product is solid.
Recovery of the leakage	Leakage does not occur because the product is solid.

7. Handling and storage precautions

Handling	Wear protective equipment such as rubber gloves and rain cape as needed to prevent skin contact with water deposited on the product. Wear protective glasses, dust mask, etc. as needed to prevent eye contact and nasal inhalation of dust released by cutting. Thoroughly remove dust deposited on work wears. Be sure to gargle and wash hands after handling. Install local ventilation equipment, etc., in indoor handling work sites where dust is released.
Storage	Store in firm flat place. In construction sites, use pallets and fillers to avoid placing the products directly on the earth, put them on firm flat place, and be sure to store them covered with water-proof sheeting to prevent wetting.

8. Exposure control and personal protection

Not applicable because the product is typically solid, but refer to the following when dust is released due to cutting, etc.	
Control concentration	Mass concentration (inhalant dust) of working environment assessment standard partially amended on March 31, 2009 by Ministerial Notification No. 195 of MHLW: 3.0 %/(0.19×Q+1) mg/m ³ (Q: free silicic acid content %)
Permissible concentration	
Japan Society for Industrial Health (permissible concentration of 2015 edition)	
Water absorbing crystalline silica	0.03mg/m ³ (TWA)
ACGIH (2010 TLVS and BEIs)	
Silica, Crystalline-α-Quartz	0.025 mg/m ³ -8hr/Time weighted average (TWA)
Technical facility measures	For dust works such as cutting, grinding and boring, seal the source of dust release or install a dust collector (local exhaust equipment, dust removal equipment) to keep dust concentration below the control concentration.

Protective equipment

[Respiratory organ protective equipment]

Dust mask

Wear dust mask if concentration in work environment may exceed the standard written above. Concerning types of dust mask, use exchangeable dust masks or air fed dust masks that passed national assay.

Pay special attention to contact with facial surface, and appropriately implement maintenance management such as inspection and exchange of filters.

[Eye protective equipment]

Protective glasses

Use protective equipment suitable to works such as goggles and side shield safety glasses as needed.

[Skin protective equipment]

Protective gloves

Wear work gloves as needed.

Further, wear rubber gloves to prevent contact with water kept in contact with the product for a long time.

Hygiene measures

Be sure to gargle and wash hands after handling.

9. Physical and chemical properties

Physical state

Appearance

Physical state Solid, plate

Color Product surface is colored.

Odor No special odor

Density

0.9-1.3 g/cm³

Solubility

Difficultly soluble in water, slightly soluble in acid.

Other

Involatile

10. Stability and reactivity

Stability

Stable under typical handling conditions

Possibility of hazardous reaction

Not applicable

Condition to be avoided

Dust proliferation

Hazardous decomposition products

Not applicable

11. Toxicological information

Acute toxicity

[Oral]

No data

[Dermal]

No data

[Inhalation (dust)]

No data

Skin corrosive and irritant properties

Skin contact for a long time may cause inflammation.

Serious eye damage, eye irritant property

Eye contact may cause inflammation.

Respiratory organ or skin sensitizing property

No data

Germ cell mutagenicity

Not classified

Carcinogenicity

Category 1A

International Agency for Research on Cancer IARC68(1997)

National Toxicology Program NTP RoC (11th, 2005)

Recommendation by Japan Society for Industrial Health (2015)

American Conference of Industrial Hygienists (ACGIH)

EPA

EU

K

1

A2

Not applicable

Not applicable

Reproductive toxicity

No data

Specific target organ/systemic toxicity (single exposure)

Category 1 (respiratory system)

Specific target organ/systemic toxicity (repeated exposure)

Category 1 (respiratory system, kidney)

Aspiration hazard

No data

12. Ecological information

Ecotoxicity

No data

Persistence and biodegradability

No data

Bioaccumulation potential

No data

Mobility in soil

No data

13. Disposal consideration

Classification

Dispose in accordance with laws concerning waste disposal and cleaning.
 Alternatively, outsource to professionals approbated by the prefectural governor.
 Wastes discharged from site of work-pieces: [Rubbles]
 Wastes discharged from other than site of work-pieces: [Glass and pottery wastes]
 Concerning disposal classification, ask related sections of prefectures.

14. Transport information

Pay attention to water wetting.
 Be sure to lay flat avoiding standing or stacking, and transport keeping levelness.
 Strong vibration or impact may cause breakage.
 After unpacking, carry the products vertically paying attention not to break corners by hitting or dropping.

15. Regulatory information

Industrial Safety and Health Act

Notifiable substances (Article 57-2, Appended table 9 of Enforcement Order Article 18-2, Government Ordinance No. 312)
 Appended table 1 of Ordinance on Prevention of Hazards Due to Dust

Pneumoconiosis Act

Waste Disposal and Public Cleaning Law

16. Other information

Reference

Text for training method for creation of MSDS of mixture (chemical substance) corresponding to GHS (Japan Industrial Safety and Health Association)
 Handout for the briefing session concerning “Display and MSDS notification system in the Industrial Safety and Health Act” (Osaka Labor Bureau)
 Hazard communication of chemicals based on GHS - Labelling and Safety Data Sheet (SDS) (JIS Z 7253:2012)
 Classification of Chemicals based on GHS (JIS Z 7252:2009)
 GHS Classification Guidance for Enterprises (2013 Revised Edition (Ver.1.1)) (March, 2015, Ministry of Economy, Trade and Industry)
 nite Incorporated Administrative Agency National Institute of Technology and Evaluation: Chemical Risk Information Platform (CHRIP)
 GHS Mixture Classification System (Ver1.3)

* This product safety data sheet offers information owned by KMEW at this time to business operators handling the product as the “Reference Information” for securing safety handling.
 Although the content was prepared based upon the documents, information and data obtained so far, it may be revised with new knowledge.
 Values of content, physical and chemical properties, hazards information and so forth are not guaranteed values.
 Since the content applies to normal handling, we cordially ask you, in the case of special handling, to handle after implementing safety measures suitable for new usage and use method.