SAFETY DATA SHEET

SDS Number: A-701E
Date of Last Revision: 30 June 2026

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the product

Products Name: Module Cement

1.2 Identified Use

Use of the products is restricted to “professional users” for application as thermal insulation, heat shields, heat containment, gaskets and expansion joints at temperatures up to 1200°C in industrial furnaces, ovens, kilns, boilers and other process equipment and in the aerospace and automotive industries. Products are not intended for direct sale to the general public

- **Primary Use:** Manufacture of fiber (refers to the initial production of the fiber and is therefore not relevant to the downstream user, secondary and tertiary use are relevant to users)
- **Secondary Use:** Conversion into wet and dry mixtures and articles (refer to section 8)
- **Tertiary Use**: Installation, removal (industrial and professional) / Maintenance and service life (industrial and professional) (refer to section 8)

Uses Advised Against
Spraying of the product

1.3 Identification of the Manufacturer/Supplier

ISOLITE INSULATING PRODUCTS Co.,Ltd.
7 Mukaiyama, Hagi-cho,Toyokawa-shi, Aichi Pref., Japan 441-0201
Tel: +81(533)88-3111
Fax: +81(533)88-2931

1.4 Emergency contact number

Safety and Environment Dept.
Tel: +81(533)88-3111
Fax: +81(533)88-2931
Language: Japanese
Opening hours: Only available during office hours

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance/mixture

Mixture
GHS Classification

Item		Evaluation	Remarks
Physical Hazards	Explosives	Not classified	
	Flammable gases	Not classified	
	Flammable aerosols	Not classified	
	Chemicals under pressure	Not classified	
	Oxidizing gases	Not classified	
	Gases under pressure	Not classified	
	Flammable liquids	Not classified	
	Flammable solids	Not classified	

	Self-reactive substance and mixtures	Not classified	
	Pyrophoric liquids	Not classified	
	Pyrophoric solids	Not classified	
	Self-heating substances and mixtures	Not classified	
	Substances and mixtures ,witch in contact with water ,emit flammable gases	Not classified	
	Oxidizing liquids	Not classified	
	Oxidizing solids	Not classified	
	Organic peroxides	Not classified	
	Corrosive to metals	Classification not possible	No data available
	Desensitized explosives	Not classified	
Health Hazards	Acute toxicity (oral)	Category 4	
	Acute toxicity (dermal)	Classification not possible	No data available
	Acute toxicity (inhalation)	Classification not possible	No data available
	Skin corrosion/irritation	Category 2	Skin irritation
	Serious eye damage/eye irritation	Category 2B	Eye irritation
	Respiratory sensitizer	Classification not possible	No data available
	Skin sensitizer	Classification not possible	No data available
	Germ cell mutagenicity	Classification not possible	No data available
	Carcinogenicity	Category1A	
	Toxic to reproduction	Classification not possible	No data available
	Specific target organ/systemic toxicity (Single Exposure)	Category 3	Respiratory tract irritation
	Specific target organ/systemic toxicity (Repeated Exposure)	Category 1	Respiratory system,Kidneys,Lungs,Immune system
	Aspiration hazard	Classification not possible	No data available
Environmental Hazards	Hazard to Aquatic Environment (Acute)	Classification not possible	No data available
	Hazard to Aquatic Environment (Chronicity)	Classification not possible	No data available
	Hazard to Ozone layer	Classification not possible	No data available

2.2 Labelling elements

Hazard pictogram



Signal Word

Danger

Hazard Statements

- Harmful if swallowed
- Causes skin irritation
- Causes serious eye irritation
- May cause respiratory irritation
- May cause cancer
- Causes damage to the immune system, respiratory system, kidneys, and lungs through prolonged or repeated exposure

Precautionary statements

- Do not handle until all safety instructions have been read and understood. (P202)
- Do not eat, drink or smoke when using this product. (P270)
- Minimize dust inhalation. (P260/P261)
- Wear Protective gloves. (P280)
- Wear respiratory protection. (P284)
- Wash hands thoroughly after handling.(P264)

2.3 Other hazards which do not result in classification:

Mild mechanical irritation to skin, eyes and upper respiratory system may result from exposure.
These effects are usually temporary

3. COMPOSITION / INFORMATION OF INGREDIENTS

3.1 Composition

COMPONENT	CAS NUMBER	% by weight
Aluminum oxide	1344-28-1	10-30
Silicon dioxide	7631-86-9	15-55
Sodium Silicate	1344-09-8	20-50
Water	7732-18-5	5-15
Titanium dioxide	13463-67-7	0-1

4. FIRST AID MEASURES

Inhalation
Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a doctor/physician.

Skin
Rinse skin with water or lukewarm water, then wash thoroughly with soap. If pain persists or any symptoms occur, seek medical attention.

Eyes
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Swallowed
Rinse mouth thoroughly with water. Seek medical attention if any irritation or discomfort persists.

5. FIRE-FIGHTING MEASURES

Non combustible products. Packaging and surrounding materials may be combustible. Class of reaction to fire is zero.

Use extinguishing agent suitable for surrounding combustible materials

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Where abnormally high dust concentrations occur, provide workers with appropriate protective equipment as detailed in section 8.

Restrict access to the area to a minimum number of workers required.
Restore the situation to normal as quickly as possible.

6.2 Environmental precautions

Prevent further dust dispersion for example by dampening the materials
Do not flush spillage to drain.
Check for local regulations, which may apply.

6.3 Methods and materials for containment and clean up

Pick up large pieces and use a vacuum cleaner fitted with a high efficiency filter (HEPA)
If brushing is used, ensure that the area is wetted down first.
Do not use compressed air for clean up.
Do not allow to be wind blown.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling can be a source of dust emission and therefore the processes should be designed to limit the amount of handling. Whenever possible, handling should be carried out under controlled conditions (i.e., using dust exhaust system).
Regular good housekeeping will minimise secondary dust dispersal.

7.2 Conditions for safe storage

Store in original packaging in dry area whilst awaiting use
Always use sealed and visibly labelled containers.
Avoid damaging containers.
Reduce dust emission during unpacking.
Emptied containers, which may contain debris, should be cleaned (see 6.3) before disposal or recycling.
Recyclable cardboard and/or plastic films are recommended for packaging.

7.3 Specific end use

The main application of these products is as thermal insulation. Use of the products is restricted to “professional users”. Please refer to section 8 and the relevant exposure scenario.

8. RISK MANAGEMENT MEASURES/EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Engineering measures

Use this product only in a totally enclosed systems or local exhaust ventilation. Make available in the work area with emergency shower and eye shower.

8.2 Exposure controls

ACGIH's : Aluminum Oxide TLV-TWA 1mg/m^3(Respirable particulate matter)
Quartz TLV-TWA 0.025mg/m^3(Respirable particulate matter)
Cristobalite TLV-TWA 0.025mg/㎥(Respirable particulate matter
Titanium dioxide TLV-TWA 2.5mg/㎥(Respirable particulate matter)

8.3 Personal protective equipment

Respiratory protection: Dust prptective mask
Eye protection : Safety goggles or face shield
Hand, skin, and body protection : Protective clothing, Protective gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

APPEARANCE	Amorphous	**Color**	Gray
ODOUR	None	**MELTING POINT**	No data
BOILING POINT	Not applicable	**FLAMMABILITY**	Not applicable
EXPLOSIVE PROPERTIES	Not applicable	**FLASH POINT**	Not applicable
AUTOFLAMMABILITY	Not applicable	**Decomposition temperature**	No data
pH	Around 11	**Kinematic viscosity**	No data
SOLUBILITY	Less than 1 mg/l	**PARTITION COEFFICIENT**	Not applicable
VAPOUR PRESSURE	Not applicable	**Relative vapor density**	No data

Density and/or relative density Absolute specific gravity2～3

LENGTH WEIGHTED GEOMETRIC MEAN DIAMETER OF FIBRES CONTAINED IN THE PRODUCT No data

9.2 Other safety Information

These materials are dense materials and so will settle rapidly from both air and liquid

10. STABILITY AND REACTIVITY

10.1 Reactivity

These materials are stable and non reactive.

10.2 Chemical stability

These materials are inorganic, stable and inert

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid

Please refer to handling and storage advice in Section 7

10.5 Incompatible materials

None

10.6 Hazardous decomposition products

None

11. TOXICOLOGICAL INFORMATION

[Information on Ingredients] / [Component Information]

・Aluminum oxide
  Specific target organ toxicity (single exposure): Classified as Category 3 (Respiratory tract irritation)
  Specific target organ toxicity (repeated exposure): Classified as Category 1

・Silicon dioxide
  Serious eye damage/eye irritation: Classified as Category 2
  Carcinogenicity: Classified as Category 1A

・Sodium silicate
  Acute toxicity (oral): Classified as Category 4
  Skin corrosion/irritation: Classified as Category 2
  Serious eye damage/eye irritation: Classified as Category 1
  "While the individual component is classified as Serious Eye Damage (Category 1), the product as a whole (mixture) is down-classified to 'Category 2B (Eye irritation)' based on dilution and bridging principles."

・Titanium dioxide
  Carcinogenicity: Classified as Category 2
  Specific target organ toxicity (repeated exposure): Classified as Category 1 (Respiratory system)

12. ECOLOGICAL INFORMATION

These products are inert materials that remain stable overtime.
These products are insoluble in the natural environment and are chemically identical to inorganic compounds found in the soil and sediment.
These materials are inorganic and a dense material, which will settle rapidly from both air and liquid.

No adverse effects of this material on the environment are anticipated.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment

To prevent waste materials from becoming airborne during waste storage, transportation and disposal, a covered container or plastic bagging is recommended.

13.2 Additional information

This product, as manufactured, is not classified as a hazardous waste according to Federal regulations (40 CFR 261). Any processing, use, alteration or chemical additions to the product, as purchased, may alter the disposal requirements. Under Federal regulations, it is the waste generator's responsibility to properly characterize a waste material, to determine if it is a "hazardous" waste. Check local, regional, state or provincial regulations to identify all applicable disposal requirements.

14. TRANSPORT INFORMATION

Not classified as dangerous goods under relevant international transport regulations (ADR, RID, IATA, IMDG, ADN).
Ensure that dust is not wind blown during transportation.

Definitions:

ADR	Transport by road, Council Directive 94/55/EC
IMDG	Regulations relating to transport by sea
RID	Transport by rail, Council Directive 96/49/EC
ICAO/IATA	Regulations relating to transport by air
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

15. REGULATORY INFORMATION

No information available.

16. OTHER INFORMATION

USEFUL REFERENCES (the directives which are cited must be considered in their amended version)

- Hazards from the use of Refractory Ceramic Fibre. Health and Safety Executive: Information document, HSE 267 (1998).
- Working with High Temperature Insulation wools 2006;
- ECFIA; Code of Practice.
- Maxim LD et al (1998). CARE – A European programme for monitoring and reducing Refractory Ceramic Fibre dust at the workplace initial results; Gefahrstoffe – Reinhaltung der Luft, 58:3,97-103.
- Recognition and control of exposure to RCF, ECFIA, April 2009
- TRGS 619 – Technical Rules for Hazardous substances: Substitution Products for Aluminium silicate wools.

Websites
European Industry Association Representing HTIW (ECFIA): 3, Rue du Colonel Moll, 75017 Paris
Tel. +33 (0) 6 31 48 74 26
www.ecfia.eu

NOTICE:

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