

Safety Data Sheet

1. Identification of the product and of the company

[Product information]

Product name : LOTUSLITE A-10,A-20,A-25
 General name : Water Repellent Agent
 Recommended application : Water Repellent Agent for Calcium Silicate Thermal Insulation or Fireproofing Board
 And restrictions of use: Avoid use other than that recommended

[Corporate information]

Company name : Japan Insulation Co., Ltd
 Address : 4064-1, Azakitanuma, Nodashinden, Mizuho city, Gifu prefecture
 Section in charge : Quality Control Section, Manufacturing Division
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2. Hazards identification

GHS classification: Classification as mixture

Physical Hazards	Explosives	No classification
	Flammable gases	No classification
	Aerosols	No classification
	Chemicals under pressure	No classification
	Oxidizing gases	No classification
	Gas under pressure	No classification
	Flammable liquids	No classification
	Flammable solid	No classification
	Self-reactive substance and mixtures	No classification
	Pyrophoric liquids	No classification
	Pyrophoric solids	No classification
	Self-heating substances and mixtures	No classification
	Substances and mixtures which, in contact with water, emit flammable gases	No classification
	Oxidizing liquids	No classification
	Oxidizing solids	No classification
	Organic peroxides	No classification
	Corrosive to metals	No classification
	Desensitize explosives	No classification
Health Hazards	Acute toxicity (oral)	Classification not possible
	Acute toxicity (dermal)	Classification not possible
	Acute toxicity (Inhalation: Gases)	No classification
	Acute toxicity (inhalation: vapour)	No classification
	Acute toxicity (Inhalation: Dusts)	Classification not possible
	Acute toxicity (inhalation: mist)	No classification
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Respiratory sensitization	Classification not possible
	Skin sensitization	Classification not possible
	Germ cell mutagenicity	Classification not possible
	Carcinogenicity	Classification not possible
	Reproductive toxicity	Classification not possible

Environmental Hazards	Specific target organ toxicity (single exposure)	Classification not possible
	Specific target organ toxicity (repeated exposure)	Classification not possible
	Aspiration hazard	Classification not possible
	Hazardous to the aquatic environment Short-term(acute)	Classification not possible
	Hazardous to the aquatic environment Long-term(chronic)	Classification not possible
	Hazardous to the ozone layer	Classification not possible

Note) The component, which information or knowledge for GHS classification is unavailable, is not included into evaluation or is classified into "Classification not possible".

GHS label elements:

< Pictograms >



< Signal words >

Danger

< Hazardous information >

Cause severe skin burns and eye damage.

< Safety measures >

Do not breathe mist/vapour/spray.

Wash your hands thoroughly after handling.

Do not touch eyes.

Wear appropriate protective equipment (as specified in Section 8).

< Emergency measures >

If swallowed: Rinse mouth. Do not induce vomiting.

If on skin (or hair): Immediately remove all contaminated clothing. Rinse skin with water for several minutes.

Wash contaminated clothing before reuse.

If inhaled: Move the person to fresh air and keep them at rest in a position comfortable for breathing. Seek immediate medical attention.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.

< Storage >

Do not store the product in locations where it may be exposed to rain.

Store away from direct sunlight.

Use promptly after opening the container.

< Disposal >

Entrust disposal to a waste management contractor licensed by the prefectural governor.

3. Composition/Information of ingredients

Substance/Mixture: Mixture

Chemical name or General name	CAS No.	Official Gazette published docket number	Content (wt%)
Potassium methylsiliconate	31795-24-1	(2)-2086	1~10
Sodium silicate	1344-09-8	(1)-508	1~5
Potassium silicate	1312-76-1	1-459	0.1~3

Note) Information of the raw materials, which are main components, object substances mentioned in law 1) or 2), or considered to have other risk hazard, are listed in above table.

This product does not fall under formaldehyde releasing building material, so it is out of notified material. Hence, this product does not contain substances regulated by the Building Code such as chlorpyrifos and formaldehyde because these substances are not used as raw materials or in the process.

Furthermore, the chemical substances which are mentioned below are not used similarly to the product.

Toluene, Xylene, Paradichlorobenzene, Ethylbenzene, Styrene, Di-n-butyl phthalate, Tetradecane, Di-2-ethylhexyl phthalate,
Diazinon, Acetic aldehyde, Fenobucarb, Other volatile organic compounds.

4. First-aid measures

Inhalation:	Move the person to fresh air and keep them comfortable for breathing. Seek medical attention. Rinse the mouth thoroughly with water.
Skin contact:	Wash the affected area promptly with plenty of water and soap. Remove contaminated clothing and shoes immediately. As this product is alkaline, do not use soap on the affected area. Rinse with lukewarm water or water while washing continuously until skin irritation or slippery feeling disappears.
Eye contact:	Rinse cautiously with clean water for at least 15 minutes and seek medical attention immediately. If contact lenses are worn, remove them after rinsing for 5 minutes, then continue rinsing for at least an additional 15 minutes. During rinsing, keep the eyelids open with fingers to ensure water reaches all areas of the eye and eyelids.
Ingestion:	Rinse the mouth thoroughly with water. Give plenty of water and, if possible, induce vomiting. Seek medical attention immediately.
Exposure or suspected exposure:	Seek medical diagnosis and treatment. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Because this product is noncombustible, it is unnecessary to take fire-fighting measure.

Suitable Extinguishing Media: Not present due to noncombustible.

Inappropriate Media: Not present due to noncombustible.

6. Accidental Release Measures

<Precautions for the human body >

If the container of this product is damaged and the liquid spills onto the floor or other surfaces, wear appropriate protective equipment as specified in Section 8 to prevent skin contact or eye contact, and clean up promptly.

<Precautions for the environment >

Take care to prevent the product from being released into rivers or other bodies of water, where it may cause environmental impact.

<Containment and purification methods and equipment >

For small amounts, wipe up with rags or similar materials.

For large amounts, recover as much as possible into a tank or suitable container as necessary.

7. Handling and Storage

<Precautions for Handling>

Do not inhale mist, vapor, or spray.

Wash hands thoroughly after handling. Avoid contact with eyes.

Wear appropriate protective equipment as specified in Section 8.

<Precautions for Storage>

Do not store the product in locations exposed to rain.

Store away from direct sunlight.

Use promptly after opening the container.

8. Exposure Controls/Personal Protection

Engineering controls : Install hand-washing stations or wash basins near the handling area as necessary.

Personal protective equipment

Eyes and faces protection : Wear safety spectacles or goggles compliant with JIS T 8147.

Skin and body protection :	Use impermeable protective clothing such as apron-type garments or arm covers appropriate for the work, ensuring that no skin is exposed.
Hand protection:	Wear impermeable chemical-resistant gloves compliant with JIS T 8166. Recommended materials: nitrile rubber gloves, butyl rubber gloves. Do not use non-impermeable gloves such as cotton work gloves.
Respiratory protection :	Normally not required. However, if mist or aerosol inhalation may occur, wear a dust mask appropriate for the work being performed.

9. Physical/Chemical Properties

Physical state:	Liquid
Color:	Colorless
Odor:	Odorless
Boiling Point or Initial Boiling Point and Boiling Range:	Lack of data.
Flammability:	Non-flammable
Lower and Upper Explosion Limit /Flammable Limits	
(Approximate volume % in air):	Not applicable.
Flash point:	Not applicable.
Auto-ignition Temperature:	None.
Decomposition Temperature:	Lack of data.
pH:	11 to 14
Kinematic Viscosity:	Lack of data.
Vapor Pressure:	Lack of data.
Relative Density:	1.0 to 1.2 g/cm ³
Relative gas density:	Not applicable.
Particle characteristics:	Not applicable.

10. Stability and Reactivity

Reactivity:	This product may gel upon heating, cooling, or mixing with other chemicals. When it comes into contact with acids, it reacts and generates reaction heat.
Chemical stability:	Stable under normal handling conditions. No flammability, combustibility, oxidizability, self-reactivity, or explosiveness.
Possibility of hazardous reactions:	This product reacts violently with hydrofluoric acid and may generate silicon tetrafluoride gas. It may corrode metals such as zinc, aluminum, tin, and lead, potentially generating flammable hydrogen gas.
Conditions to avoid:	Contact with incompatible materials; high temperatures or low temperatures that may cause freezing.
Incompatible materials:	Hydrofluoric acid; amphoteric metals such as zinc, aluminum, tin, and lead.
Hazardous decomposition products:	Lack of data.

11. Toxicological Information

Skin corrosion/irritation:	The product contains 1.0% or more of “Potassium methylsiliconate, GHS Category 1A”, and the worker may be exposed during use. So it is classified into Category 1.
Serious eye damage/eye irritation:	The product contains 1.0% or more of “Potassium methylsiliconate, GHS Category 1”, and the worker may be exposed during use. So it is classified into Category 1.

[Information of component]

Information of potassium methylsiliconate

Skin corrosion/irritation

Evaluation: Severe skin burns are expected on skin contact.

Result / Effect	Species / Test system	Source of reference
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Severe skin burns	Rabbit	Estimated by similar products
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Serious eye damage/eye irritation

Evaluation: Irreversible effects on the eye are expected upon eye contact.

Result / Effect	Species / Test system	Source of reference
Severe eye burns	Rabbit	Estimated by similar products

Information of sodium silicate

Serious eye damage/eye irritation: Severe irritation is present.

Information of potassium silicate

Skin corrosion/irritation: Based on a pH value of 11.5 or higher, it is classified as Category 1.

Serious eye damage/eye irritation: Classified as Category 1 based on the results of skin corrosion studies.

12. Ecological information

Hazardous to the aquatic environment (acute): Classification not possible due to lack of data.

Hazardous to the aquatic environment

(long-term): Classification not possible due to lack of data.

Persistence and degradability: Lack of data.

Bioaccumulative potential: Lack of data.

Mobility in soil: Lack of data.

Hazardous to ozone layer: Classification not possible due to lack of data.

[Information of component]

Information of sodium silicate

Hazardous to the aquatic environment (acute):

Fishes Mosquitofish TLm=2,400mg/L/96H
TLm= 895mg/L/24H

Crustacean Amphipoda TLm=263mg/L/48H
TLm=160mg/L/96H

Crustacean Amphipoda TLm=247mg/L/96H
TLm (Median Tolerance Limit) :
The concentration at which 50% of the test
organisms are killed within a certain period of time.

13 Disposal Consideration

Residual waste: Dilute with water to prepare a weak aqueous solution, neutralize with an acid (such as dilute hydrochloric acid or dilute sulfuric acid), and then further dilute with a large amount of water before disposal.
Waste alkali is designated as Specially Controlled Industrial Waste, so its collection, transportation, and disposal must be carried out in accordance with the prescribed regulations.

Contaminated containers and packaging: Dispose of as industrial waste in an appropriate manner.

14. Transport Information

When transporting this product, ensure that the container has no leaks, load it so that it will not be damaged by overturning or dropping, and take adequate measures to prevent load collapse.

[Domestic regulation]

Refer to Clause 15

[International regulation]

Marine transportation(IMDG)

Evaluation Hazardous substances

UN Number: 3267
 Proper Shipping Name: Corrosive, liquid, basic, organic, n.o.s.
 (contains potassium methylsiliconate)
 Class: 8
 Packing Group: II

Air transportation(ICA0/IATA)

Evaluation Hazardous substances
 UN Number: 3267
 Proper Shipping Name: Corrosive, liquid, basic, organic, n.o.s.
 (contains potassium methylsiliconate)
 Class: 8
 Packing Group: II

15. Japanese Regulatory Information

Japanese Industrial Safety and Health Law: Not applicable.
 Law Concerning the Reporting of the Release into the Environment of Specific Chemical Substances and Promoting Improvements in Their Management. (PRTR Law): Not applicable.
 Japanese Poisonous and Deleterious Substances Control Law: Not applicable
 Japanese Ship Safety Law: Corrosive substance.
 Japanese Aviation law: Corrosive substance.
 Japanese Marine Pollution Control Law: Hazardous liquid substances Class Y substances (limited to those transported as bulk liquid cargo by ship).
 Japanese Water Pollution Control Law: Living Environment Items (Article 3, Paragraph 1 of the Enforcement Order)
 (Emission standard for hydrogen ion concentration)
 Emitted to public waters other than sea areas :
 From 5.8 to 9.0
 Emitted to the sea areas : From 5.0 to 9.0
 Japanese Dust Obstacle Ordinance on Prevention: Not applicable
 Pneumoconiosis Act: Not applicable

16. Other information

[Reference]

- 1) Data based on raw material SDS.
- 2) Chemical substances total information supplement system: National Institute of Technology and Evaluation (NITE).
- 3) JIS Z 7253: 2019 (Hazard communication of chemicals based on GHS – Labelling and Safety Data Sheet (SDS)).

The information contained herein may be revised based on new knowledge.
 Among the descriptions of this MSDS, the information such as the content and the physical/chemical properties does not represent a guarantee. Evaluation of hazards is prepared based on our material and data of the product available at the date of publishing, but it is not considered to be exhaustive.
