

## **Safety Data Sheet**

### **1. Identification of the product and of the company**

#### **[Product information]**

Product name : LOTUSLITE A-30  
 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  
 Telephone No. : +81-58-326-3221  
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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                                                  | Classification not possible |
|                  | 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 |
|                  | Specific target organ toxicity (single exposure)                           | Classification not possible |

|                                                                                                                                                                                  |                                                         |                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------|
|                                                                                                                                                                                  | Specific target organ toxicity (repeated exposure)      | Classification not possible |
|                                                                                                                                                                                  | Aspiration hazard                                       | Classification not possible |
| Environmental Hazards                                                                                                                                                            | 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 >

serious 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%) |
|-------------------------------|------------|------------------------------------------|---------------|
| Ethoxylated isoalkane alcohol | 78330-20-8 | 7-97                                     | 0.2~3.0       |
| Sodium nitrite                | 7632-00-0  | 1-483                                    | 0.02~0.3      |
| Lithium silicate              | 12627-14-4 | 1-770                                    | 5~15          |

(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.<br>Remove contaminated clothing and shoes immediately.<br>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.<br>If any abnormality occurs on the skin, seek medical advice. |
| Eye contact:                    | Rinse cautiously with clean water for at least 15 minutes and seek medical attention immediately.<br>If contact lenses are worn, remove them after rinsing for 5 minutes, then continue rinsing for at least an additional 15 minutes.<br>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.<br>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:                                                    | Milky white                                                     |
| Odor:                                                     | Odorless                                                        |
| Boiling Point or Initial Boiling Point and Boiling Range: | 100°C                                                           |
| Flammability:                                             | Non-flammable                                                   |
| Lower and Upper Explosion Limit /Flammable Limits         |                                                                 |
| (Approximate volume % in air):                            | Not applicable.                                                 |
| Flash point:                                              | Closed-cup test: >100 °C<br>Cleveland open-cup test: >100.00 °C |
| Auto-ignition Temperature:                                | None.                                                           |
| Decomposition Temperature:                                | Lack of data.                                                   |
| pH:                                                       | 9 to 11                                                         |
| Kinematic Viscosity:                                      | 1,000 mPa·s                                                     |
| Vapor Pressure:                                           | Lack of data.                                                   |
| Relative Density:                                         | Lack of data.                                                   |
| 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.<br>When it comes into contact with acids, it reacts and generates reaction heat.                                                                                                                                                                                                                                                                                                 |
| Chemical stability:                 | Stable under normal handling conditions.<br>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.<br>It may corrode metals such as zinc, aluminum, tin, and lead, potentially generating flammable hydrogen gas.<br><br>When heated in air to temperatures above 150 °C (300 °F), the product may release formaldehyde vapor. Safe handling conditions are maintained by keeping the concentration of formaldehyde vapor within occupational exposure limits. |
| 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:   | Formaldehyde. Other hazardous products may also be generated.                                                                                                                                                                                                                                                                                                                                                                                                |

## 11. Toxicological Information

Serious eye damage/eye irritation: The product contains 3.0% or more of “Ethoxylated isoalkane alcohol, GHS Category 1”, and it poses a risk of causing serious eye damage. Therefore, it is classified into Category 1.

[Information of component]

### Information of Ethoxylated isoalkane alcohol

Serious eye damage/eye irritation: May cause severe eye irritation.  
May cause corneal injury.

### Information of Sodium nitrite

Serious eye damage/eye irritation: May cause moderate eye irritation.  
May cause mild, transient corneal injury.

#### Information of Lithium silicate

Serious eye damage/eye irritation: Based on empirical knowledge, it is considered to have the potential to cause eye irritation.

## 12. Ecological information

Hazardous to the aquatic environment (acute): Not applicable  
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 Ethoxylated isoalkane alcohol

Ecotoxicity / Environmental effects(acute):

Fishes(Leuciscus) TLm = 1–10 mg/L / 96 h  
Invertebrates TLm = 1–10 mg/L / 48 h  
Algae TLm = 1–10 mg/L / 72 h  
The concentration at which 50% of the test  
orgaisms are killed within a certain period of time.

[Information of component]

Information of Sodium nitrite

Ecotoxicity /

<http://zdosk02/scripts/cbgrn/grn.exe/mail/index?aid=126&cid=1940>

Environmental TLm = 0.54  
effects(acute): mg/L / 96 h  
Fish TLm = 130 mg/L  
Oncorhynchus / 24 h  
mykiss (Rainbow TLm = 100 mg/L  
trout) / 72 h  
Invertebrates The  
Daphnia magna concentration at  
Algae which 50% of the  
Desmodesmus test orgaisms  
subspicatus are killed within  
a certain period  
of time.  
Toxicity:  
Bacteria TLm = 281mg/L  
/ 48 h  
Chronic:  
Fish Cyprinus TLm = 21 mg/L /  
carpio (Carp) 30 days  
Invertebrates TLm = 9.86  
(Penaeid shrimp) mg/L / 80 h  
Persistence and  
degradability Biodegradation  
Degradability: is not applicable.  
Theoretical  
oxygen demand:

0.23 mg/mg  
Bioaccumulative Low potential  
potential for  
bioaccumulation.

[Information of component]  
Information of Lithium silicate

Mobility in soil Because it is an aqueous solution, it can penetrate into soil.

### 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)**  
**Air transportation(ICA/IATA)**  
**Special safety measures**

Not applicable to IMDG.  
Not applicable to IATA codes.  
Before transport, ensure that containers are free from leakage, and load them securely to prevent tipping, falling, or damage.  
Do not transport together with food or feed.  
During transport, avoid direct sunlight and ensure that containers are protected from damage, corrosion, and leakage.  
Prevent load shifting.  
Do not stack heavy items on top.

### 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.