

SAFETY DATA SHEET

Revised on: Sep 9, 2021

1. PRODUCT AND COMPANY IDENTIFICATION

Company: KUNIMINE INDUSTRIES CO., LTD.

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Tokyo 101-0032, Japan

Name of section: Management Department
Quality Assurance Office

Phone number: +81-3-3866-7251

Fax number: +81-3-3866-2256

<https://www.kunimine.co.jp/toiawase/>

Company: Tradeploy International Pty. Ltd.

Address: PO Box 11, Mulgoa, NSW, Australia 2745
25 Winbourne Road, Mulgoa, NSW, Australia 2745

Phone number: +61-414-308-681

E-mail: tradeploy@hotmail.com

Product Name: Kuniseal C-31DS
Recommended use of the product
and restriction on use:

Reference Number (SDS No.) S-6005

Water-Sealing Material

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

PHYSICAL HAZARDS	
Explosives	Not applicable
Flammable gases	Not applicable
Flammable aerosols	Not applicable
Oxidizing gases	Not applicable
Gases under pressure	Not applicable
Flammable liquids	Not applicable
Flammable solids	Not classified
Self-reactive substances and mixtures	Not applicable
Pyrophoric liquids	Not applicable
Pyrophoric solids	Not classified
Self-heating substances and mixtures	Not classified
Substances and mixtures which, in contact with water, emit flammable gases	Not classified
Oxidizing liquids	Not applicable
Oxidizing solids	Classification not possible
Organic peroxide	Not applicable
Corrosive to metals	Classification not possible

HEALTH HAZARDS	
Acute toxicity (oral)	Classification not possible
Acute toxicity (skin)	Classification not possible
Acute toxicity (inhalation: gas)	Not applicable
Acute toxicity (inhalation: vapor)	Not applicable
Acute toxicity (inhalation: dust)	Category 4
Acute toxicity (inhalation: mist)	Not applicable
Skin corrosion/irritation	Category 3
Serious eye damages /eye irritation	Category 2B
Respiratory sensitization	Classification not possible
Skin sensitization	Classification not possible
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1A
Reproductive toxicity	Classification not possible
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	Classification not possible

ENVIRONMENTAL HAZARDS	
Aquatic toxicity (acute)	Not classified
Aquatic toxicity (chronic)	Classification not possible

LABELLING:



SIGNAL WORD: DANGER

HAZARD STATEMENTS:

- May cause damage to respiratory system or kidney through long-term or repeated exposure.

PRECAUTIONARY STATEMENTS:

[Safety measures]

- Obtain the safety data sheet (SDS) before using.
- Do not handle until all safety precautions have been read and understood.
- Wear personal protective equipment and use ventilators, as required, to avoid exposure.
- Wash hands thoroughly after handling.

[First-aid procedures]

- If exposed, or possibly exposed, get medical attention.
- If you feel unwell, get medical attention.

[Storage]

- Store in a dry place to avoid getting wet or provide sufficient water protection.

[Disposal]

- Have contents/containers disposed by a waste disposer authorized by the prefectural governor.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture : Mixture
Chemical name : Bentonite
Ingredients : Clay mineral mainly composed of montmorillonite and also typically including quartz, cristobalite, zeolite, feldspar

Chemical formula or structural formula : $\text{Si}_8(\text{Al}_{3.34}\text{Mg}_{0.66})\text{Na}_{0.66}\text{O}_{20}(\text{OH})_4$

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. : Not applicable

Industrial Safety and Health Act (Substance subject to notice) : Silica (Cabinet Order No.312)

CAS No. : 1302-78-9

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvement to the Management Thereof (PRTR Law) : Not Applicable

Chemical name : Petroleum-based hydrocarbon and additive agents

Common name : Petroleum-based hydrocarbon and additive agents

Chemical formula or structural formula : Unidentifiable

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. : Not disclosed

Industrial Safety and Health Act : Not disclosed

CAS No. : Not disclosed

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvement to the Management Thereof (PRTR Law) : Not applicable

Chemical name : Calcium octadecanoate

Common name : Calcium stearate

Chemical formula or structural formula : $(\text{C}_{17}\text{H}_{35}\text{COO})_2\text{Ca}$

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. : 2-611

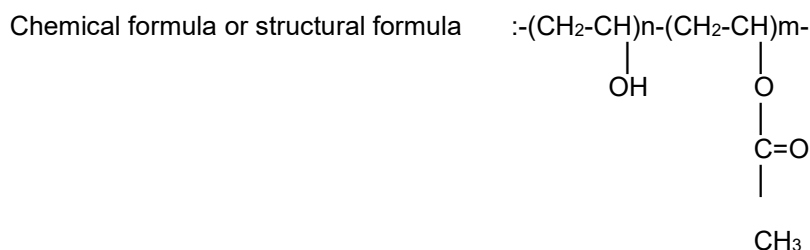
Industrial Safety and Health Act : Existing

CAS No. : 1592-23-0

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvement to the Management Thereof (PRTR Law) : Not applicable

Chemical name : Polyvinyl alcohol

Common name : Polyvinyl alcohol (Poval)



Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. :6-682
 Industrial Safety and Health Act :6-682
 CAS No. :9002-89-5 (Full saponified product)
 :25213-24-5 (Partially saponified product)
 TSCA :Registered
 Act on Confirmation, etc. of Release :Not applicable
 Amounts of Specific Chemical Substances in the Environment and Promotion of Improvement to the Management Thereof (PRTR Law)

4. FIRST-AID MEASURES

- Eye contact : Do not rub. Rinse with plenty of clean running water. (Remove contact lenses, if possible.) If eye irritation occurs, get medical attention immediately.
- Skin contact : Wash the affected area with plenty of water and soap. If skin irritation occurs, get medical attention immediately.
- Inhalation : Transfer the victim immediately to open air and place in a position comfortable for breathing. If symptoms persist, get medical attention.
- Ingestion : Wash the mouth well with clean water. Get medical attention.

5. FIRE-FIGHTING MEASURES

- Extinguishing method : In case of fire in vicinity, transfer the container immediately to a safe place.
 : In case of local fire, spray water or use appropriate extinguishing agent for initial fire fighting.
 : Isolate combustion source from the origin of fire, and extinguish the fire by using appropriate extinguishing agent.
 : If the container cannot be removed, spray water around it to cool it and to avoid its destruction.
 : Fire fighting should be done from the upwind, as much as possible.
 : Take appropriate measures to avoid a release of substance which may cause environmental impact due to fire-fighting water spray, etc.
- Specific hazards during a fire : Hazardous gases, such as carbon monoxide, are contained in combustion gas. Avoid inhaling smoke during the fire-fighting operation.
- Suitable extinguishing media : Water, foam, powder, CO₂, etc.
- Protection of fire-fighters : During fire-fighting, wear appropriate protective equipment (gloves, protective goggles and gas mask). Combustion gas contains hazardous gas such as carbon monoxide. Avoid inhaling smoke during the fire-fighting operation.

6. ACCIDENTAL RELEASE MEASURES

[Personal precautions, protective equipment and emergency procedures]

- : Wear dust mask, protective gloves, protective glasses, etc. during work.
- : In a case of exposure to water, the floor will become slippery. Be careful not to fall on the floor.

[Environmental precautions]

- : To recover the spill, sweep up or use vacuum cleaner, etc. to avoid scattering the spill then collect it in an empty container.
- : After recovery, wash the spilled area with plenty of water.
- : Take steps not to let the spilled product or cleaning water reach a river or pond to prevent any effect on the environment.

7. HANDLING AND STORAGE

[Handling] : Wear appropriate protective equipment (dust mask, protective gloves, protective glasses, etc.) to avoid inhalation or contact. After handling, wash hands, face, etc. with plenty of clean water.

- : The material becomes swollen and slippery, if in contact with water. Be careful not to fall on the floor
- : Avoid falling, dropping, dragging, or other rough handling of containers.
- : Used empty containers are to be stored at a designated area.

[Storage] : Designate a storage area, isolate from other materials, and store this material in a sealed package once the container is opened.

- : Take necessary measures to avoid exposure to water, and check for any spills periodically.
- : Store this material indoors, avoiding humid areas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control limit : Mineral dust $E=3.0/(1.19Q+1)$ (mg/m³)
E: Control limit, Q: Content of free silicic acid (%)

Occupational exposure limit : Japan Society for Occupational Health (2014) 0.5 mg/m³ (inhalant dust)
2.0 mg/m³ (total dust)

Facility and equipment measures : To prevent the contamination of workplace air by dust, it is recommended to install local dust collector, to air-tighten the facilities, or to provide general ventilation properly.

- : Provide eye wash station and body shower, if necessary, and indicate the location clearly.

[Personal protection equipment]

Respiratory system protection : Protective dust mask

Hand protection : Protective gloves

Eye protection : Ordinary-glasses-type equipment with side shields or goggles-type equipment

Skin and body protection : Protective clothing with long-sleeves and safety boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Paste form, plastic rod-shaped substance
Odor	: Slight characteristic odor (Calcium Octadecanoate)
Color	: Dark gray
Specific gravity	: Approximately 1.57 (20°C)
Boiling point	: No data
Flash point	: 233°C
Melting point	: No data (measured up to 200 °C)
Solubility	: Insoluble in water
Self-ignition temperature	: No data
Flammability	: Not applicable to flammable solids of Hazardous Materials Category 2.
Auto-reactivity	: Not available
Explosibility	: Not available

10. STABILITY AND REACTIVITY

Stability and reactivity	: Stable for normal handling
Possibility of hazardous reactions	: Cation exchange property
Condition to be avoided	: Daylight, heat, humidity

11. TOXICOLOGICAL INFORMATION

This product contains 15% ±5% of crystalline silica (CAS No. 14808-60-7, No.14464-46-1). Long-term exposure to such substances as exceeds the tolerated concentration in the form of dust may cause a hazardous effect on respiratory system.

Acute toxicity:

Oral : Rat Oral LD₅₀ > 10,000 mg /kg;l)
(For Calcium Octadecanoate)

Oral : Mouse Oral LD₅₀ > 10,000 mg / kg;l)
(For Calcium Octadecanoate)

Skin : No data

Inhalation (dust) : No data

Intravenous (rat) LD₅₀: 35 mg/kg (RTECS)
(For Bentonite)

Skin corrosion/irritation : Mild irritation is reported in a study using rabbits. (For petroleum-based hydrocarbon and additive agents)

Serious eye damage/Eye irritation : Mild irritation is reported in a study using rabbits. (Petroleum-based hydrocarbon and additive agents)

Respiratory or dermal sensitization: : No data

Germ cell mutagenicity : Not classified

Carcinogenicity	: International Agency for Research on Cancer (IARC) shows that crystalline Silica is in "Group 1: Carcinogenic to Human in Carcinogenic Risk Classification". Recommendation of Japan Society for Occupation Health has classified it in Group 1, Category 1A. Under IARC monograph, highly refined oil is classified in Group 3, and ACGIH Recommendation looks to have almost similar categories. Mineral oil, under EU evaluation, is not necessarily subject to classification as carcinogenic substance.
Reproductive toxicity	: No data
Specific target organ/systemic toxicity (single exposure)	: Data amount is substantially smaller than that of repeated exposure, however, it is reported that even a short-term exposure to the human body with high inhalation concentration may affect the respiratory system. IARC monograph is a Priority 1 Document, it is classified as Category 1 (respiratory system): Disorder to the respiratory system.
Specific target organ/systemic toxicity (repeated exposure)	: In a Priority 1 Document, it is reported that repeated exposure may affect the respiratory system and kidney, and the product is classified in Category 1 (respiratory system and kidney)
Aspiration respiratory system toxicity	: No data

12. ECOLOGICAL INFORMATION

Biodegradability	: Substance which is difficult to be biodegraded.
Bioaccumulation	: No data
Ichthyotoxicity (acute)	: No data

13. DISPOSAL CONSIDERATIONS

- : A small quantity is to be disposed of as general waste.
- : A large quantity is to be disposed of by a waste treatment company.
- : In case of empty containers, remove all the contents in advance.

14. TRANSPORT INFORMATION

[International regulations]

Sea	: Non-hazardous product
Air	: Non-hazardous product

[Domestic regulations]

Land	: Not applicable
Sea	: Non-hazardous product
Air	: Non-hazardous product

- | | |
|-------------------|---|
| Security measures | : Make sure that there is no spill from the container. Do not tumble, drop, or break the container when loading. Take necessary measures to prevent collapsing of cargo during transit.
: Avoid exposure to water. |
|-------------------|---|

15. REGULATORY INFORMATION

- : Industrial Safety and Health Act, Article 57-2, Order for Enforcement of the Act, Article 18-2, Appendix 9: Hazardous Substance of which name should be notified.
- : Fire Service Act (Hazardous material Category 4, Class IV Petroleum, Hazardous materials Class III)
- : Law Relating to the Prevention of Marine Pollution and Marine Disasters (Oil Discharge Regulations)
- : Sewerage Act (Mineral Oil Discharge Regulations)
- : Water Pollution Control Act (Oil Discharge Regulations)
- : Wastes Management and Public Cleaning Act

16. OTHER INFORMATION

- Kagakudaijiten, Kyoritsu Shuppan Co., Ltd. (1993)
- IARC68 (1997)
- IARC Monographs programme on the Evaluation of Carcinogenic Risk Humans (1987)
- Council Directive 67/548/EEC Annex I “List of Dangerous Substances”
- Nendo Handobukku, Gihodo Shuppan Co., Ltd. (2009)
- 15509 no kagakushohin, The Chemical Daily Co., Ltd. (2009)
- Kosanbutsu no tsisiki to torihiki, Research Institute of Economy, Trade and Industry (1979)
- Japan Society for Industrial Health, Recommendation 2014
- Registry of Toxic Effects of Chemical Substances
- Sangyo tyudoku binran, Ishiyaku Publishers, Inc. (1990)
- Toxic Properties of Polymers and Additives
- STN: Material Safety Data Sheets OHS
- Existing Chemical Substances Safety Check Data
- Syracuse Research Corporation online LOGKOW demo.

[Others]

This Safety Data Sheet gives a brief summary of items to be paid attention to for proper use of our product, subject to normal handling.

All specifications contained herein are reference information to assure safe handling of the product, and do not give a guarantee of any kind.

In case of unusual handling, it is the user's responsibility to take safety measures appropriate to the application and use in advance.