



SAFETY DATA SHEET

According to JIS Z 7253:2019

Revision date 29-Feb-2024

Revision Number 1.06

Section 1: PRODUCT AND COMPANY IDENTIFICATION

| Product Name | Calcium Chloride (for U-tube) |
|--------------|-------------------------------|
| Product Code | 030-25305,036-25307 |

Supplier FUJIFILM Wako Pure Chemical Corporation

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Recommended uses For research use only

Restrictions on useSeek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Acute toxicity - OralCategory 4Serious eye damage/eye irritationCategory 1Specific target organ toxicity (single exposure)Category 3

Category 3 Respiratory irritation

Specific target organ toxicity (repeated exposure) Category 2

Category 2 blood system



Hazard statements

H318 - Causes serious eye damage

H302 - Harmful if swallowed

H335 - May cause respiratory irritation

H373 - May cause damage to the following organs through prolonged or repeated exposure: blood system

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- · Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not breathe dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area

Precautionary statements-(Response)

- Get medical advice/attention if you feel unwell
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

- Call a POISON CENTER or doctor/physician if you feel unwell
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- · Rinse mouth

Precautionary statements-(Storage)

- Store in a well-ventilated place. Keep container tightly closed
- · Store locked up

Precautionary statements-(Disposal)

• Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula CaCl2

| Chemical Name | Weight-% | Molecular weight | ENCS | ISHL No. | CAS RN |
|------------------|----------|------------------|---------|----------|------------|
| Calcium chloride | 90.0 | 110.98 | (1)-176 | * | 10043-52-4 |

Note on ISHL No.:

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

^{*} in the table means announced chemical substances.

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Be careful to hygroscopic. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Storage

Safe storage conditions

Storage conditions Store away from sunlight in well-ventilated place at room temperature (preferably cool).

Keep container tightly closed.

Safe packaging material Polypropylene, Polyethylene Incompatible substances No information available

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Personal protective equipment

Respiratory protection Dust mask (JIS T 8151)

Hand protection chemical protective gloves (JIS T 8116)

Eye protection protective eyeglasses or chemical safety goggles (JIS T 8147)

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Color White - pale brown

Appearance mass

Odor

Melting point/freezing point

Boiling point, initial boiling point and boiling range
Flammability

Flammability (solid, gas):

no data available
no data available
no data available
no data available

Upper/lower flammability or explosive limits

Upper:
Lower:
no data available
pH
no data available
no data available
no data available

Dynamic viscosity no data available no data available

Solubilities water : freely soluble . Ethanol : soluble .

n-Octanol/water partition coefficient:(log Pow) no data available Vapour pressure no data available

Specific Gravity / Relative density 2.15

Vapour densityno data availableParticle characteristicsno data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available

Chemical stability This material is deliquescent.

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight, Moisture

Incompatible materials

No information available

Hazardous decomposition products

Halides

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------|---------------------------|-----------------------|-----------------|
| Calcium chloride | 1,940 mg/kg (Rat, Female) | >5,000 mg/kg (Rabbit) | N/A |

| Chemical Name | Acute toxicity -oral- source information | Acute toxicity -dermal- source information | Acute toxicity -inhalation gas- source information |
|------------------|--|--|---|
| Calcium chloride | Based on the NITE GHS | Based on the NITE GHS | Based on the NITE GHS |
| | classification results. | classification results. | classification results. |

| Chemical Name | Acute toxicity -inhalation | Acute toxicity -inhalation dust- | Acute toxicity -inhalation mist- |
|------------------|----------------------------|----------------------------------|----------------------------------|
| | vapor- source information | source information | source information |
| Calcium chloride | Based on the NITE GHS | Based on the NITE GHS | Based on the NITE GHS |
| | classification results. | classification results. | classification results. |

Skin irritation/corrosion

| Chemical Name | Skin corrosion/irritation source information | |
|------------------|---|--|
| Calcium chloride | Based on the NITE GHS classification results. | |

Serious eye damage/ irritation

| Chemical Name | Serious eye damage/irritation source information | |
|------------------|--|--|
| Calcium chloride | Based on the NITE GHS classification results. | |

Pagniratory or ekin concitization

| Chamical Name | | |
|--|--|--|
| Chemical Name | Respiratory or Skin sensitization source information | |
| Calcium chloride | Based on the NITE GHS classification results. | |
| Reproductive cell mutagenicity | | |
| Chemical Name | Chemical Name germ cell mutagencity source information | |
| Calcium chloride | Based on the NITE GHS classification results. | |
| Carcinogenicity | · | |
| Chemical Name | Carcinogenicity source information | |
| Calcium chloride Based on the NITE GHS classification results. | | |

Reproductive toxicity

| Chemical Name | Reproductive toxicity source information | |
|--|---|--|
| Calcium chloride Based on the NITE GHS classification results. | | |
| STOT-single exposure | | |
| Chemical Name | STOT -single exposure- source information | |
| Calcium chloride | Based on the NITE GHS classification results. | |
| STOT-repeated exposure | | |
| Chemical Name | STOT -repeated exposure- source information | |

| Chemical Name | Aspiration Hazard source information |
|-------------------|---|
| Aspiration hazard | |
| Calcium chloride | Based on the NITE GHS classification results. |
| | · |

| | Chemical Name | Aspiration Hazard source information |
|---|------------------|---|
| ſ | Calcium chloride | Based on the NITE GHS classification results. |

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity No information available

Other data

| Chemical Name | Short-term (acute) hazardous to the | Long-term (chronic) hazardous to the | |
|------------------|--|--|--|
| | aquatic environment source information | aquatic environment source information | |
| Calcium chloride | Based on the NITE GHS classification | Based on the NITE GHS classification | |
| | results. | results. | |

Persistence and degradability No information available Bioaccumulative potential No information available Mobility in soil No information available Hazard to the ozone layer No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID Not regulated

UN number Proper shipping name:

UN classfication

Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IMDG Not regulated UN number -

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Marine pollutant (Sea) Not applicable

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA Not regulated

UN number -

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Environmentally Hazardous Not applicable

Substance

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act
Poisonous and Deleterious
Substances Control Law
Not applicable
Not applicable

Industrial Safety and Health Act Not applicable

Industrial Safety and Health Act (2024~)

Regulations for the carriage Not applicable

and storage of dangerous

goods in ship

Civil Aeronautics Law Not applicable Pollutant Release and Transfer Not applicable

Register Law

(2023.4.1-)

Export Trade Control Order Not applicable

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN)

http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations

RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS

Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.

[2024.4.1~] Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

Record of SDS revisions

Disclaimer

The following contents were revised. Regulatory information.

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet