# MATERIALS SAFETY DATA SHEET

## Section 1: Chemical product and company identification

| | |
|---|---|
| **Product name:** | Cashica-CL |
| **Manufacturer:** | OZO Kagakugiken CO., LTD. |
| **Address:** | 1-19-12, Higashiai, Ibaraki-shi, Osaka 567-0002 |
| **Tel:** | +81-(0)72-640-0909 |
| **Fax:** | +81-(0)72-640-0911 |
| **Emergency phone number:** | +81-(0)72-640-0909 |
| **Recommended use:** | Desiccant |
| **MSDS number:** | 96101E |

## Section 2: Hazards identification

**GHS Classification**

| | |
|---|---|
| **Physical hazards:** | Not classified |
| **Health hazards:** | Skin corrosion/ irritation: Category 3 |
| **Serious eye damage/ eye irritation:** | Category 2 |
| **Environmental hazards:** | Not classified |

**GHS label elements**

**Pictogram:**

| | |
|---|---|
| **Signal word:** | Warning |
| **Hazards statement:** | Causes mild skin irritation<br>Causes eye irritation |
| **Precautionary statement:** | |
| **[Prevention]** | Wash hands thoroughly after handling.<br>Wear eye protection/ face protection. |
| **[Response]** | If skin irritation occurs: Get medical advice/attention.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/ attention. |
| **[Storage]** | Keep away from fire or moisture and store in a well-ventilated place. |
| **[Disposal]** | Dispose of contents/container in accordance with related laws and regulations. |

Important symptoms and an outline of an anticipated emergency

Skin and eye irritation

## Section 3: Composition/ information on ingredients

Discrimination of single substance or mixture: Mixture

Common name or chemical name: **Cachica-CL**

**Information on ingredients**

| Chemical name | CAS number | Class reference No. in the JPN Gazetted list | Concentration |
|---|---|---|---|
| Magnesium oxide | 1309-48-4 | 1-465 | 100% in total |
| Magnesium chloride (anhydrite) | 7786-30-3 | 1-233 | |
| Packaging sheet* | — | — | — |

* Consists of three layers: Water repellent Japanese paper, two axis stretched strengthening polyethylene and polyethylene

## Section 4: First aid measures

**IF INHALED:** Gargle thoroughly with water. Get medical attention if any symptoms appear.

**IF ON SKIN:** Immediately wash well with clean water and soap. Get medical advice/attention if skin irritation occurs.

**IF IN EYES:** Immediately rinse with clean water and get medical attention. Get medical advice/attention if irritation persists.

**IF INGESTED:** Gargle thoroughly with water. Get medical attention if any symptoms appear.

**Expected acute and/or delayed effects:** Skin and eye irritation

**Protection of first-aiders:** Wear protective equipment for the skin and eyes as appropriate.

## Section 5: Firefighting measures

**Suitable extinguishing media:** Water, fire foam, powder or carbon dioxide

**Unsuitable extinguishing media:** No information

**Special hazards arising from the substance or mixture:** Contents of the product is non-flammable, however packaging is combustible. In case of fire, irritating gases, e.g., chlorine gas, may be produced due to decomposition of magnesium chloride

**Advice for firefighters:** If inhaled gases or vapours, get medical attention.
Protection of firefighters
Wear protective equipment as appropriate.

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

If generation of dust is concerned, workers should wear appropriate protective equipment to avoid contact with skin and eyes (See "Section 8. Exposure controls/ personal protection").

### Environmental precautions

Do not release large amount of the product into the environment.

### Methods and material for containment and cleaning up

Spilled product should be swept up and dealt with appropriately.
Remaining small amount of the product is washed away with water.

### Prevention of secondary accidents

Since the product is deliquescent, floors should completely be cleaned up because it may be slippery if the product remains on the floor.

## Section 7: Handling and storage

### Precautions for safe handling

#### Technical measures

Take necessary measures described in "Section 8. Exposure controls/ personal protection" and wear protective equipment as appropriate.

#### Local and overall ventilation

If generation of dust is concerned, handle in a well-ventilated place.

#### Containment and measures for safe handling

Because of high hygroscopic properties, immediately start using the product after opening the container.
Due to its hygroscopic nature, the product gradually solidifies during use.
In order to prevent spill of the product, care should be made so that breaking packaging/ container will not occur.

### Conditions for safe storage, including any incompatibilities

#### Technical measures

Store in a well-ventilated and dry place.

#### Incompatible materials

Ignition sources, water and oxidising agents

#### Recommended storage conditions

Avoid humidity and tightly closed.

#### Packaging materials

Use container which can prevent from getting wet.

## Section 8: Exposure controls/ personal protection

**Control/ administrative exposure standards**

Not established.

**Threshold values (occupational exposure limits or biological exposure index)**

ACGIH TLV-TWA (2009): 10 mg/m3 (as Magnesium oxide)
Japan SOH (2009): Not established.

**Protective equipment**

Respiratory protection: If generation of dust is concerned, were respiratory protective equipment as appropriate.
Hand protection: If skin contact is possible, wear protective gloves.
Eye protection: If generation of dust is concerned, wear protective glasses as appropriate.
Skin and body protection: If direct contact with skin is concerned, wear gloves and protective clothing.

**Good hygiene measures**

Do not eat, drink or smoke when using the product.

## Section 9: Physical and chemical properties

**Information on basic physical and chemical properties**

Appearance (physical state, shape and colour, etc):
Gray-white granule
Melting/freezing point: 2,800 ºC (Magnesium oxide)
712 ºC (Magnesium chloride)
105 – 275 ºC (Packaging sheet)
Boiling point, initial boiling point/ boiling range:
3,600 ºC (Magnesium oxide)
1,412 ºC (Magnesium chloride)
Relative density: 3.6 (Magnesium oxide)
2.3 (Magnesium chloride)
Solubility: (in water 20 ºC) Poorly soluble (Magnesium oxide)
(in water 20 ºC) 54.3 mg/100mL (Magnesium chloride)
Ignition point: > 350 ºC (Packaging sheet)
Flammability: Packaging sheet is flammable but contents are not

## Section 10: Stability and reactivity

**Stability:**

Magnesium oxide: Reacts with acids and yields magnesium salts.
Has a hygroscopic nature and
absorbs carbon dioxide which leads to producing carbonates.
Magnesium chloride: Has a deliquescent property.
Absorbs water in air which leads to producing hydrates
(MgCl 2 ·6H2O).

**Possible hazardous reactions:**

Magnesium chloride generates heat due to absorption of moisture.

**Conditions to avoid:**

Do not mix with ignition source, water and oxidising agents.

**Incompatible materials:**

Water and oxidising agents

**Hazardous decomposition products**

In case of fire, irritating gases, e.g., chlorine gas, may be produced due to decomposition of magnesium chloride

## Section 11: Toxicological information

**Information on the product**

No information

**Information on ingredient-1: Magnesium oxide**

Serious eye damage/eye irritation: Irritating to eyes and nose

Carcinogenicity: ACGIH classifies as A4 substance (not classifiable as a human carcinogen).

STOT-single exposure: If inhaled fume, may case metal fume fever. If exposed of newly produced fume, may cause headache, cough, sweating, vomiting or fever.

**Information on ingredient-2: Magnesium chloride**

Acute toxicity (oral): LD 50 (rats) = 2,800 mg/kg

Irritation: May cause tentative skin inflammation if exposed of chlorine gas (decomposition product).Irritating to skin and eyes.

## Section 12: Ecological information

**Information on the product:**

No information

**Information on ingredient-1: Magnesium oxide**

No information

**Information on ingredient-2: Magnesium chloride**

Aquatic toxicity (acute): Fish (fathead minnow) 96-h LC 50 > 2,120 mg/L
Crustacea (daphnia magna) 48-h EC 50 > 140 mg/L

## Section 13: Disposal consideration

**Remaining product**

Wastes should be dealt with in accordance with related laws and standards (national, regional or local regulations).

Disclose the contents of the waste if consult to a waste trader.

When incinerated, separate the packaging sheet and contents and incinerate only the packaging sheet by a certificated incinerator.

In case of land burial, follow the related laws and treats as non-hazardous wastes. In such a case segregation of the contents and packaging sheet is recommended.

In order to prevent any possible environmental pollution, do not release/dispose of the product into any aquatic environments.

**Contaminated containers and packaging**

Used container should be recycled after cleaning or dispose of in compliance with related laws and local regulations.

Contents should be removed completely when dispose of containers.

## Section 14: Transport information

**International transport information**

**UN number:** Not applicable
**UN proper shipping name:** Not applicable
**UN classification:** Not applicable
**Environmental hazards:** Not warranted as a aquatic pollutants

**Domestic transport information (Japan)**

Not applicable

**Guideline for an emergency (Yellow-card) number**

Not available

**Specific measures for safe transport**

Use moisture prevention container and tightly closed.
Ensure appropriate measures to prevent loading damage, falling containers or getting wet the product.

## Section 15: Regulatory information

**Safety, health and environmental regulations/ legislation specific for the substance or mixture**

Act on Prevention of Marine Pollution and Maritime Disaster:
Hazardous liquid: Z class substance (Magnesium chloride)

## Section 16: Other information

**References**

AQUIRE 2010
ACGIH 2001
ICSC 1997
IUCLID 2000

【Disclaimer】
This MSDS has been prepared according to JIS Z 7250:2005 and JIS Z 7251:2006, and based on the best available information however, it may not be sufficient in some cases. It is User's responsibility to modify or update any contents in this MSDS regarding information on hazardous properties and/ or instruction for safe handing of the product when they become available. Precautionary measures in this MSDS are only applicable for normal handling conditions and it is necessary to take appropriate additional measures to ensure safe handling which depend on your specific use conditions or situations.