Safety Data Sheet (SDS)

1. Identification

- **Product name**: KIMILOID
- **Product code**: 02
- **Manufacture's name**: KIMICA Corporation
- **Address**: 2-4-1, Yaesu, Chuo-ku, Tokyo, 104-0028 Japan
- **Telephone number**: 81-3-3548-1941 (KIMICA - Head Office)
- **Fax number**: 81-3-3548-1942
- **E-mail**: tokyo-office@kimica.jp
- **Emergency telephone number**: 81-439-87-1131 (KIMICA - Chiba Plant)

2. Hazard identification

- **GHS classification**
  - Physical and chemical hazards: Not applicable
  - Health hazards: Not applicable
  - Environmental hazards: Not applicable

- **Label Element**
  - Pictogram or symbol: None
  - Signal word: None
  - Hazard statement: None
  - Precautionary statement
    - **Safety measure**: Wash hands thoroughly after handling the product
    - **First aid measures**: In case of skin contact, wash with running water or shower and soap. If in eyes, rinse carefully with water for several minutes. If skin irritation, rash or eye irritation persists, seek medical advice and attention

- **Recommended use and Limit in the use**: Keep container tightly closed and store in a cool, well-ventilated place.

- **Outsource the contents and containers to a specialized waste disposal contractor licensed by the prefectural governor**.
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/Mixture distinction</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical name or general name</td>
<td>Propylene Glycol Alginate</td>
</tr>
<tr>
<td>Another name</td>
<td>None</td>
</tr>
<tr>
<td>CAS No.</td>
<td>9005-37-2</td>
</tr>
<tr>
<td>Reference Number in Gazetted List in Japan (Chemical Substances Control Law)</td>
<td>8-247</td>
</tr>
<tr>
<td>Reference Number in Gazetted List in Japan (Industrial Safety and Health Act)</td>
<td>None</td>
</tr>
</tbody>
</table>

4. First-aid measures

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If you cough violently or have difficulty breathing, get medical advice immediately while giving oxygen.

**Skin contact**
Rinse with running water or shower and soap.
If skin irritation or rash occurs, seek medical advice and attention.

**Eye contact**
Rinse with water for a few minutes. Then remove contact lenses, if present and easy to do. Continue cleaning thereafter.
If eye irritation persists, seek medical advice and attention.

**Ingestion**
Rinse your mouth. Don't force yourself to vomit.
If you feel unwell, seek medical advice and attention.

**Most important symptoms and effects, both acute and delayed**
None

**Personal protective equipment (PPE) for first-aid responders**
See section 8.

**Special precautions for doctors**
None

**Other**
Change contaminated clothing.

5. Fire-fighting measures

**Suitable extinguishing media**
Use water, foam or dry chemical powder.

**Banned extinguishing media**
Data not available

**Specific hazard**
None
6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Wear protective equipment with sufficient ventilation to prevent exposure.

**Environmental precautions**
Be careful not to allow this product to drain into drains.

**Methods and materials for containment and cleaning up**
Sweep with a broom or collect with a vacuum cleaner while paying attention to the scattering of dust. This product swells when it absorbs water, and it becomes viscous. If it has absorbed water on the floor, wash it away with a large amount of water and remove it neatly.

7. Handling and storage

**Handling**

**Engineering controls**
Handle in a well-ventilated place. Take the equipment measures and wear protective equipment described in “8. Exposure controls/personal protection”.

**Precautions for safe handling**
Handle the container (craft bag + plastic bag) carefully so as not to damage it. Avoid getting wet and rough handling, and avoid scattering powder. Avoid contact with skin, eyes and clothing, and swallowing.

**Contact avoidance materials**
Avoid contact with water, moisture and hot bodies.

**Advice on general occupational hygiene**
When handling this product, wear protective equipment and pay attention to foreign matter contamination.

**Storage**

**Technical measures**
Storage areas should be clean to prevent product contamination.

**Incompatible materials**
None

**Storage conditions**
Avoid moisture and store in a cool, dark place.

**Containers and Packaging**
Craft bag + plastic bag
8. Exposure controls/personal protection

- **Standard control concentration**
  - Japan Society for Occupational Health: No settings
  - ACGIH: No settings

- **Allowable concentration**
  - Japan Society for Occupational Health: No settings
  - ACGIH: No settings

**Equipment measures**
- Prevent scattering of fine powder by dust collector.

**Protective equipments**
- **respiratory protective equipment**: Dust mask
- **Hand protection equipment**: Chemical resistant gloves
- **Eye protection equipment**: Safety glasses
- **Skin and body protection equipment**: Chemical resistant protective clothing

9. Physical and chemical properties

- **Appearance (physical state, shape, colour, etc.)**: White to yellowish white fibrous powder
- **Odour**: Practically odorless
- **Odor threshold**: No data
- **pH**: 3.0-5.0 (1% solution)
- **Melting point/Freezing point**: None
- **Boiling point or initial boiling point and boiling range**: None
  - 122°C
    - * According to JIS K 2265-2 Flash point measurement (rapid equilibrium sealing method).
  - 126°C
    - * According to JIS K 2265-4 Combustion point measurement (cleveland open method).
- **Flash point**: No data
- **Evaporation rate**: No data
- **Flammability (solid, gas)**: No data
- **Lower and upper explosion limit/flammability limit**: No data
- **Vapor pressure**: No data
- **Vapor density**: No data
- **Density (relative density)**: No data
- **Solubility**: Soluble in water, insoluble in organic solvents
- **Partition coefficient n-octanol / water**: No data
- **Auto-ignition temperature**: 430°C
Decomposition temperature
No data

Lower explosion limit
80~85g/m³,
* According to JIS Z 8818 Lower explosive limit concentration measurement method for combustible dust (blowing dust explosion test equipment).

Minimum ignition energy
30~100mJ

Maximum explosion index
No data

Dust explosion class
No data

Maximum explosion pressure
7.2 x 10³kPa/s,
* According to JIS Z 8817 Measurement method of explosive pressure and pressure rise rate of combustible dust (spherical dust explosion test equipment).

10. Stability and reactivity

Chemical stability
Stable under normal handling conditions (indoor, normal temperature)

Possibility of hazardous reactions
None

Conditions to avoid
Storage under high temperature

Incompatible materials
None

Hazardous decomposition products
None

11. Toxicological information

Acute toxicity
LD₅₀ Oral-Rat 7,200mg/kg
LD₅₀ Oral-Mouse 7,800mg/kg
LD₅₀ Oral-Rabbit 7,600mg/kg
LD₅₀ Oral-Hamster 7,000mg/kg

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
Reverse mutation test, Chromosomal aberration test, Dominant lethal test: Negative

Carcinogenicity
No data available

Reproductive toxicity
Two generations of rats were fed 5%(1.0g/kg body weight/day) of Propylene glycol alginate, but there was no difference in performance, mortality, mean body weight, conception, pregnancy, and F1 and F2 lactation and survival.
No abnormalities were found in F2 hematology and macroscopic and pathological examinations of major organs.
Oral administration of 170mg/kg body weight/day of Propylene glycol alginate to mice on days 6-15 of pregnancy did not affect pregnancy, maternal and fetal survival rates, and did not affect fetal visceral or skeletal findings.

Oral administration of 800 mg/kg body weight/day of Propylene glycol arginate was given to rabbits 6 to 18 days of pregnancy, but the test showed no effect.

Oral administration of 720mg/kg body weight/day of Propylene glycol arginate to rats on gestational days 6 to 15 showed no effect on the administration of both maternal animals and fetuses.

Oral administration of 700 mg/kg body weight/day of Propylene glycol arginate to hamsters between gestation days 6 and 10 showed no toxic effects on maternal animals and no effects on fertility. There was no effect of treatment on fetal examination.

| Specific target organ toxicity - single exposure | No data available |
| Specific target organ toxicity - repeated exposure | No data available |
| Aspiration hazard | No data available |

12. Ecological information

| Ecotoxicity | No data available |
| Persistence and degradability | It is easily degraded by microorganisms in the environment. |
| Bioaccumulative potential | No data available |
| Mobility in soil | No data available |
| Adverse effects to the ozone layer | Not classified because it does not contain ozone-depleting substances listed in the Annex of the Montreal Protocol. |

13. Disposal considerations

| Residual waste | Dispose of by a contractor with a license for industrial waste treatment. |
| Contaminated containers and packaging | Dispose of properly according to national and local laws. |
| | Containers should be cleaned and recycled or disposed of properly according to national and local regulations. |
| | When disposing of empty containers, completely remove the contents.
14. Transport information

<table>
<thead>
<tr>
<th>International regulations</th>
<th>Non-dangerous goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maritime regulatory information</td>
<td>Non-dangerous goods</td>
</tr>
<tr>
<td>Aviation regulation information</td>
<td>Non-dangerous goods</td>
</tr>
<tr>
<td>UN number</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Product name (UN proper shipping name)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Transport hazard class</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Marine pollutants</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Domestic regulations</td>
<td>Non-dangerous goods</td>
</tr>
<tr>
<td>Land regulation information</td>
<td>Non-dangerous goods</td>
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<tr>
<td>Maritime regulatory information</td>
<td>Non-dangerous goods</td>
</tr>
<tr>
<td>Aviation regulation information</td>
<td>Non-dangerous goods</td>
</tr>
<tr>
<td>Special safety measures</td>
<td>Avoid loading the bag in direct sunlight and avoiding damage, corrosion or leakage of the paper bag. Ensure that cargo collapse is prevented. See also “7. Handling and storage”.</td>
</tr>
</tbody>
</table>

15. Regulatory information

(1) Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Law concerning Pollutant Release and Transfer Register / PRTR Law) | Not applicable |
(2) Occupational Safety and Health Act | Not applicable |
(3) Poisonous and Deleterious Substances Control Act | Not applicable |
(4) Explosives Control Act | Not applicable |
(5) High Pressure Gas Safety Act | Not applicable |
(6) Fire Service Act | Not applicable |
(7) Chemical Substances Control Law | Not applicable |
(8) Ship Safety Act | Not applicable |
(9) Water Pollution Prevention Act | Not applicable |
(10) Food Sanitation Act | The provisions on food additives apply. |

16. Other information

<table>
<thead>
<tr>
<th>E No.</th>
<th>E405</th>
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</thead>
<tbody>
<tr>
<td>EINECS No.</td>
<td>Not assigned</td>
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<tr>
<td>TSCA Inventory Status</td>
<td>Active</td>
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</tbody>
</table>

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