1. IDENTIFICATION OF THE SUBSTANCE AND OF THE SUPPLIER

Product Name : Heavy Magnesium Carbonate

Manufacturer
Company Name : Kyowa Chemical Industry Co., Ltd.
Address : 4035 Hayashida-cho, Sakaide, Kagawa, 762-0012, Japan
Telephone number : +81-(0) 877-47-0011

Emergency telephone number
Kyowa Chemical Industry Co., Ltd.
Telephone No. +81-(0) 877-47-4704 (Quality Assurance Dept.)
Facsimile No. +81-(0) 877-47-4724

2. HAZARDS IDENTIFICATION

GHS Classification

Physicochemical Hazards
Explosives : Out of classification
Flammable gases : Out of classification
Flammable aerosol : Out of classification
Oxidizing gases : Out of classification
Gases under pressure : Out of classification
Flammable liquids : Out of classification
Flammable solids : Not classified
Self-reactive substance and mixtures : Out of classification
Pyrophoric liquids : Out of classification
Pyrophoric solids : Not classified
Self-heating substance and mixtures : Not classified
Substance and mixtures which, in contact with water, emits flammable gases : Not classified
Oxidizing liquids : Out of classification
Oxidizing solids : Not classified
Organic peroxides : Out of classification
Corrosive to metals : Not classified
Heavy Magnesium Carbonate

Health hazards

Acute toxicity (oral) : Classification not possible
Acute toxicity (dermal) : Classification not possible
Acute toxicity (gases) : Out of classification
Acute toxicity (vapor) : Classification not possible
Acute toxicity (dust and mists) : Classification not possible
Skin corrosion / irritation : Classification not possible
Serious eye damage / eye irritation : Classification not possible
Respiratory or skin sensitization : Classification not possible
Germ cell mutagenicity : Classification not possible
Carcinogenicity : Classification not possible
Reproductive toxicity : Classification not possible
Specific target organ systemic toxicity (single exposure) : Classification not possible
Specific target organ systemic toxicity (repeated exposure) : Classification not possible
Aspiration hazard : Classification not possible

Environmental hazards

Hazardous to the aquatic environment (acute) : Classification not possible
Hazardous to the aquatic environment (chronic) : Classification not possible
Hazardous to the Ozone Layer : Not classified

Labeling elements : Nothing

Other hazard

Inhalation : May cause symptoms of mucus irritation, cough
Skin contact : Prolonged contact may cause skin irritation
Eye contact : May irritate mucus membranes
Ingestion : No symptoms occur at low dose levels but there may be nausea, vomiting at high dose levels
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Wt%</th>
<th>CAS registry #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Carbonate</td>
<td>100</td>
<td>546-93-0 (Magnesium Carbonate)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1309-42-8 (Magnesium Hydroxide)</td>
</tr>
</tbody>
</table>

Synonym(s)          | Magnesium Carbonate-Magnesium Hydroxide
EC No.               | 2089159 (Magnesium Carbonate)
|                     | 2151703 (Magnesium Hydroxide)
TSCA                 | Registered

4. FIRST AID MEASURES

Inhalation          : Remove the exposed individual into fresh air and make him blow his nose and gargle.
Eye contact         : Flash with clean water.
Skin contact        : Wash with water.
Ingestion           : Rinse mouth. In case of large amount, drink large quantity of water and induce vomiting. Refer for medical attention.
Note to physician   : Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing media : This product is non-flammable.

6. ACCIDENTAL RELEASE MEASURES

Vacuuming or wet sweeping may be used to avoid dust dispersal.

Land spill          : Sweep together and dispose according to the laws of your country.
Water spill         : Collect together and dispose according to the laws of your country.
Heavy Magnesium Carbonate

7. HANDLING AND STORAGE

Handling : It is better to wear proper protective equipment not to contact with skin or inhale the dust.
Storage : This material should be stored in a dry place and the bag must be tightly closed after use because of its hygroscopicity. This material must not close the odorous substances and volatile substances, because of its sorbability.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : Prevent dispersion of dust.
Personal protective equipment
   Eye / Face Protection : Safety Glasses
   Skin Protection : Working clothes and rubber gloves
   Respiratory Protection : Dust mask
Exposure Guidelines : Not established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : White powder
Odour : No information
Odour threshold : No information
pH : No information
Melting point : No information
Initial boiling point : 3600°C(MgO)
Flash point : No information
Evaporation rate : No information
Flammability : No information
Upper/lower flammability or explosive limits : No information
Vapour pressure : No information
Vapour density : No information
Relative density : 2.2
Solubility : Insoluble in water. Soluble in mineral acid.
Partition coefficient: n-octanol/water : No information
Auto-ignition temperature : No information
Decomposition temperature : 250°C
Viscosity : No information
10. STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions
Conditions to avoid : Wet or high temperature
                       Strong acid
Hazardous decomposition products : Nothing
Hazardous reactions : Will not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity : Not available
Skin corrosion/irritation : Prolonged contact may cause skin irritation
Eye irritation : If contacted with eyes, eyes are irritated
Respiratory or skin sensitization : Not available
STOST-single exposure : Not available
STOST-repeated exposure : Not available
Aspiration hazard : May cause symptoms of mucus irritation, cough

12. ECOLOGICAL INFORMATION

Toxicity : Not available
Persistence and degradability : Not available
Bioaccumulative potential : Not available
Mobility in soil : Not available
Other adverse effects : Not available

13. DISPOSAL CONSIDERATIONS

Disposal : In accordance with the laws of your country.
14. TRANSPORT INFORMATION

| NA | : Not applicable |
| UN No. | : Not applicable |
| ADR/RID | : Not applicable |
| IMO-IMDG code | : Not applicable |
| Hazard Label(s) | : Unnecessary |

15. REGULATORY INFORMATION

This material is classified as follows and labeled accordingly.

| Symbol(s) | : Nothing |
| R Phrase(s) | : Nothing |
| S Phrase(s) | : Nothing |

Please refer to any other national measures that may be relevant.

16. OTHER INFORMATION

No specific notes.

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