

Kyowa Chemical Industry Co., Ltd.
SAFETY DATA SHEETS

KISUMA™ 5E

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE SUPPLIER

Product name : KISUMA™ 5E
Manufacturer
Company Name : Kyowa Chemical Industry Co., Ltd.
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Emergency telephone number

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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	:	Classification not possible
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

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Health hazards

Acute toxicity (oral)	:	Not classified
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

<u>Chemical name</u>	<u>Wt%</u>	<u>CAS registry #</u>
Magnesium Hydroxide	≥ 95	1309-42-8
Coating agent (trade secret)	≤ 5	

<u>Synonym(s)</u>	Milk of magnesia; Magnesium hydrate
<u>EC No.</u>	2151703
<u>TSCA</u>	Registered

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4. FIRST AID MEASURES

- Inhalation : Remove the exposed individual into fresh air and make him blow his nose and gargle.
- Eye contact : First rinse with plenty of water for several minutes (Remove contact lenses if easily possible), then take a doctor.
- Skin contact : Remove contaminated clothes, rinse skin with plenty of water or shower.
- 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.
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5. FIRE FIGHTING MEASURES

- Extinguishing media : This product is non- flammable.
- Protection for firefighters : Firefighters should wear protective equipment.
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6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Wear proper equipment and avoid contact with skin and inhalation of dust.
- Environmental precautions : Do not discharge soil, subsoil, drain, surface water and groundwater.
- Removal : Vacuum or sweep up in a waste container. Wash away residue with plenty of water.
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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.
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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 (Nothing of particular protection)
Respiratory Protection	:	Dust mask
Exposure Guidelines	:	Recommendation of Occupational Exposure Limits (OELs) (2007) Respirable dust - 2 mg/m ³ , Total - 8 mg/m ³ The Japan Society for Occupational Health(JSOH)

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	:	2.4
Solubility	:	Slightly soluble in water. Soluble in mineral acid.
Partition coefficient: n-octanol/water	:	No information
Auto-ignition temperature	:	No information
Decomposition temperature	:	350°C
Viscosity	:	No information

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10. STABILITY AND REACTIVITY

Chemical stability	:	Stable under normal conditions
Reactivity	:	May react with oxidizing substances.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	:	Magnesium hydroxide LD ₅₀ —over 8500mg/kg oral rat ⁽¹⁾ LD ₅₀ —over 8500mg/kg oral mouse ⁽¹⁾ LD ₅₀ —about 2780mg/kg intraperitoneal rat ⁽¹⁾ LD ₅₀ —about 815mg/kg intraperitoneal mouse ⁽¹⁾ TDLo—2747mg/kg human infant ⁽²⁾
Skin corrosion/irritation	:	Not available
Eye irritation	:	If contacted with eyes, eyes are irritated
Respiratory or skin sensitization	:	Not available
Mutagenicity	:	Not available
Carcinogenicity	:	Not available
Aspiration hazard	:	Not available

Magnesium hydroxide is affirmed as GRAS (generally recognized as safe) in FDA (U.S.A.).

(1) NIIRDN Drugs in Japan(Ethical Drugs), published by YAKUGYO JIHO CO., LTD(page1131,1990)

(2) JTCTDW Journal of Toxicology, Clinical Toxicology, by Marcel Dekker, USA(Vol.29, page215,1991)

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

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13. DISPOSAL CONSIDERATIONS

Disposal methods : 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

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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