

Kyowa Chemical Industry Co., Ltd.  
**SAFETY DATA SHEETS**

**KYOWAAD™ 200 (Grade: S)**

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**1. IDENTIFICATION OF THE SUBSTANCE AND OF THE SUPPLIER**

Product Name : KYOWAAD™ 200 (Grade: S)

Manufacture

Company Name : Kyowa Chemical Industry Co., Ltd.  
Address : 305 Yashimanishi-machi, Takamatsu, Kagawa, 761-0113, Japan  
Telephone Number : +81-(0) 87-841-9156

Emergency telephone number

Kyowa Chemical Industry Co., Ltd.  
Telephone No. +81-(0) 87-844-2154 (Quality Assurance Dept.)  
Facsimile No. +81-(0) 87-844-2170

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**2. HAZARDS IDENTIFICATION**

GHS Classification

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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

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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

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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

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Labeling elements

: Nothing

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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

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Chemical name</u>	<u>Wt%</u>	<u>CAS registry #</u>
Aluminum Hydroxide	100	21645-51-2
<u>Synonym(s)</u>	Aluminum Hydroxide	
<u>EC No.</u>	2444927	
<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 noncombustible.
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 Parameters	: ACGIH (2002); 2mg/m <sup>3</sup> (as Aluminum) (TLV-TWA)

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: White powder
Odour	: No information
Odour threshold	: No information
pH	: No information
Melting point	: 2054°C(Al <sub>2</sub> O <sub>3</sub> )
Initial boiling point	: 2980°C(Al <sub>2</sub> O <sub>3</sub> )
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	: 2.0
Solubility	: Insoluble in water. Soluble in mineral acid and alkali.
Partition coefficient: n-octanol/water	: No information
Auto-ignition temperature	: No information
Decomposition temperature	: No information
Viscosity	: No information

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**10. STABILITY AND REACTIVITY**

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

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**11. TOXICOLOGICAL INFORMATION**

Acute toxicity	:	Aluminum hydroxide LD <sub>50</sub> —over 5000mg/kg oral rat <sup>(1)</sup> LDLo—150mg/kg Intraperitoneal rat <sup>(2)</sup> TDLo—122mg/kg/4D oral human child <sup>(3)</sup>
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

(1) European Chemicals Bureau; IUCLID Dataset, Aluminum hydroxide (2000)

(2) LANCAO Lancet. Vol.1, Page 564, 1972

(3) JOPDAB Journal of Pediatrics. Vol.92, Page 592, 1978

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

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

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**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.

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**16. OTHER INFORMATION**

No specific notes.

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