

Product name:
MANNITOL KAO (JP GRADE)

SAFETY DATA SHEET

1. Product and company identification

Name of chemical (Product name): MANNITOL KAO (JP GRADE)

Product No.: B0002490

Manufacturer/Importer/Distributor Information

Information on domestic manufacturer

Company Name: Kao Corporation
Address: 1-3,Bunka 2-chome,Sumida-ku,Tokyo 131-8501 Japan
Telephone: +81-3-5630-7700
Fax: +81-3-5630-7889
Division: Chemical Business
E-mail: chemical@kao.co.jp

Emergency telephone number: 81-3-5630-7700

2. Hazard(s) identification

GHS classification:

Not classified

GHS label elements

Pictograms: No symbol

Signal Word: No signal word.

Hazard Statement: Not applicable

Prevention: Wash thoroughly after handling. If needed, use personal protective equipment as required. This product may be solidified totally or partially according to the storage condition. In that case, please warm-up for melting, then use at homogeneous liquid.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Gently wash with plenty of water and soap. Call a POISON CENTER or doctor if you feel unwell.

Storage: Store in a well-ventilated place.

Disposal: -

Product name:
 MANNITOL KAO (JP GRADE)

3. Composition/information on ingredients

Substances

General information: No hazardous ingredients.

Chemical name or generic name	CAS number	ISHL	ENCS	Content in percent (%)
D-Mannitol	69-65-8	(8)-49	(8)-49	

4. First-aid measures

Description of necessary first-aid measures

Inhalation: Remove person to fresh air and keep comfortable for breathing.
Skin Contact: Gently wash with plenty of soap and water.
Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, powder

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: No data available.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Keep away from sources of ignition and use appropriate extinguishing media. Fight fire from upwind position if possible.

Special protective equipment for fire-fighters: Use goggles in combination with dust mask, and other protections as appropriate to situation.

Product name:
 MANNITOL KAO (JP GRADE)

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Use goggles and protective gloves. Large spills : Remove person to safety. Ensure adequate ventilation. Keep upwind.
Methods and material for containment and cleaning up:	Prevent dispersion of dust. Sweep or vacuum by dust-explosion-proof type cleaner.
Environmental Precautions:	Do not discharge into the drains, surface waters or ground water directly.
Prevention of secondary hazards:	No data available.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use local exhaust ventilation, in case of generation of dust.
Safe handling advice:	Avoid inhalation of fine dust . This product may be solidified totally or partially according to the storage condition. In that case, please warm-up for melting, then use at homogeneous liquid. Use an adequate ventilation. Wash thoroughly after handling. If needed, use personal protective equipment as required. Prevent generation of dust. This material may cause risk of dust explosion.
Contact avoidance measures:	No data available.
Hygiene measures:	No data available.

Storage

Safe storage conditions:	Keep container tightly closed. Store in a well-ventilated place.
Safe packaging materials:	No data available.
Storage Temperature:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits ACGIH (TLV)

: 10 mg/m³ TWA (inhalable particles, recommended);
 3 mg/m³ TWA(respirable particles, recommended)

Product name:
 MANNITOL KAO (JP GRADE)

(Particulates (insoluble or poorly soluble) not otherwise specified (PNOS))

OSHA (PEL) : 15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)
 (Particulates not otherwise regulated)

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety glasses with side shield(Safety goggles or Face shield)
Hand Protection: Material: Rubber gloves
Skin and Body Protection: Full-body suit
Respiratory Protection: Use dust mask, as appropriate to situation.
Hygiene measures: No data available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state: solid
Form: Powder
Color: White
Odor: Odorless
Odor Threshold: No data available.
Melting Point: 334 °F/168 °C
Boiling Point: > 104 °F/40 °C
Flammability: No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper: No data available.
Explosive limit - lower: No data available.

Flash Point: No data available.

Self Ignition Temperature: No data available.

Decomposition Temperature: No data available.

pH: No data available.

Viscosity

Dynamic viscosity: No data available.

Kinematic viscosity: No data available.

Flow Time: No data available.

Solubility(ies)

Solubility in Water: Soluble

Solubility (other): Insoluble in alcohols and ether

Partition coefficient (n-octanol/water): No data available.

Vapor pressure: No data available.

Relative density: No data available.

Product name:
 MANNITOL KAO (JP GRADE)

Density: No data available.
Vapor density (air=1): No data available.
Particle characteristics
Particle Size: No data available.
Particle Size Distribution: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: No data available.
Possibility of hazardous reactions: Has no self-reactivity.
Conditions to avoid: No data available.
Incompatible Materials: No data available.
Hazardous Decomposition Products: No data available.

11. Toxicological information

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat): 17.3 g/kg
 LD 50 (Mouse): 22 g/kg
 Not classified based on available data.

Dermal

Product: No data available.
 Not classified based on available data of component(s).

Inhalation

Product: Dusts, mists and fumes: Classification not possible due to insufficient data.

Skin Corrosion/Irritation

Product: Classification not possible due to insufficient data.

Serious Eye Damage/Eye Irritation

Product: Classification not possible due to insufficient data.

Respiratory or Skin Sensitization

Product: Skin: Classification not possible due to insufficient data.
 Respiratory: Classification not possible due to insufficient data.

Carcinogenicity

Product name:
MANNITOL KAO (JP GRADE)

Product: No data available.
Not classified based on available data of component(s).

IARC:
No carcinogenic components identified

NTP:
No carcinogenic components identified

JSOH:
No carcinogenic components identified

EU
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: Classification not possible due to insufficient data.

In vivo
Product: Classification not possible due to insufficient data.

Reproductive toxicity
Product: Classification not possible due to insufficient data.

Specific Target Organ Toxicity - Single Exposure
Product: Classification not possible due to insufficient data.

Specific Target Organ Toxicity - Repeated Exposure
Product: Classification not possible due to insufficient data.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment

Fish
Product: Classification not possible due to insufficient data.

Aquatic Invertebrates
Product: Classification not possible due to insufficient data.

Toxicity to Aquatic Plants
Product: No data available.

Product name:
MANNITOL KAO (JP GRADE)

Chronic hazards to the aquatic environment

Fish

Product: Classification not possible due to insufficient data.

Aquatic Invertebrates

Product: Classification not possible due to insufficient data.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Hazardous to the ozone layer: No data available.
Not classified based on available data of component(s). Not Regulated

Further Information: No data available.

13. Disposal considerations

Disposal methods: Review "HANDLING AND STORAGE (Section 7)". Passed to a licensed waste contractor. This product may cause risk of dust explosion.

Contaminated Packaging: No data available.

14. Transport information

International regulations

IMDG

Not regulated.

IATA

Not regulated.

National Regulations

Product name:
MANNITOL KAO (JP GRADE)

Domestic Standard: In compliance with domestic law.

15. Regulatory information

Industrial Safety and Health Law

Not Regulated

Poisonous and Deleterious Substances Control Act

Not Regulated

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Not Regulated

Law concerning Pollutant Release and Transfer Register

Not Regulated

Fire Service Act:

Not applicable to dangerous materials / designated flammables.

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule:

Not Regulated

Air Law, Enforcement Rule:

Not Regulated

Explosives Control Act:

Not Regulated

High Pressure Gas Safety Act:

Not Regulated

Export Trade Control Order

Not Regulated

Inventory Status:

US TSCA Inventory:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
Australia AICS:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	Contact us for information
Japan (ENCS) List:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory

Product name:
MANNITOL KAO (JP GRADE)

Philippines PICCS:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
REACH (EU):	Contact us for information
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

16. Other Information

Disclaimer:

To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor assumes any liability (including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another, in a particular process, or under unusual conditions. Determination of suitability of any material for any given purpose is the sole responsibility of the user who assumes all risk and responsibility therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacturer cannot and does not guarantee that the hazards described herein are the only ones that exist. In the case of the product for fragrance, it's in accordance with the latest standard of IFRA within ordinary use. Contact with the supplier for detail information.

Reference:

- Hazard communication of chemicals based on GHS -- Labelling and Safety Data Sheet (SDS) (JIS Z 7253 : 2019)
- International Chemical Safety Cards (ICSC) (Compiler's Guide) (1994)
- GHS guideline -- Labelling and Safety Data Sheet (2019) Japan Chemical Industry Association