



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.50

Section 1 - Product and Company Information

Product Name BENTONITE FOR ORGANIC SYSTEMS
Product Number 11958
Brand Fluka Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5832
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Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
BENTONITE	1302-78-9	No	215-108-5	

Formula H₂Al₂O₆Si
Synonyms Albagel Premium USP 4444, Bentonite 2073, Bentonite magma, HUel, Imvite I G B A, Magbond, Montmorillonite, Panther creek bentonite, Southern bentonite, Tixoton, Volcaly bentonite BC, Volclay, WilkiniteMontmorillonite

Section 3 - Hazards Identification

Emergency Overview
 Caution: Avoid contact and inhalation. Target organ(s): Lungs.

HMS Rating
 Health: 1* Flammability: 0 Reactivity: 0

NFPA Rating
 Health: 1 Flammability: 0 Reactivity: 0

*additional chronic hazards present.
 For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
 If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure
 If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Dermal Exposure
 In case of contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure
 In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

Extinguishing Media Suitable
 Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting Protective Equipment
 Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)
 Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)
 Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

Methods for Cleaning Up
 Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling User Exposure
 Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage Suitable
 Keep tightly closed.

Section 8 - Exposure Controls / PPE

Engineering Controls
 Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment

Respiratory
 Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts is desired, use type N95 (US) or type P1 (EN 143) dust masks.

Hand
 Protective gloves.

Eye
 Chemical safety goggles.

General Hygiene Measures
 Wash thoroughly after handling.

Exposure Limits

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Source	Type	Value
OSHA	PEL	0.1 mg/m ³
OSHA	PEL	15 mg/m ³
ACGIH	TLV	0.05 mg/m ³
ACGIH	TLV	10 mg/m ³

Section 9 - Physical/Chemical Properties

Appearance	Physical State	Color	Form
	Solid	Grey	Powder

Molecular Weight 180.1 AMU

pH	6 - 9
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	2.4 g/cm ³
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A

Explosion Limits N/A

Flammability N/A
Autoignition Temp N/A
Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable
 Stable.
Materials to Avoid
 Strong acids.

Hazardous Decomposition Products
Hazardous Decomposition Products
 Nature of decomposition products not known

Hazardous Polymerization
Hazardous Polymerization
 Will not occur.

Section 11 - Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through the skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

Target Organ(s) or System(s)

Lungs.

Signs and Symptoms of Exposure

Exposure may cause: Lung irritation, Asthma.

RTECS Number: CT9450000

Toxicity Data

Intravenous - Rat: 35 MG/KG (LD50)

Remarks: Lungs, Thorax, or Respiration: Acute pulmonary edema.

Chronic Exposure - Carcinogen

Mouse - Oral: 12000 GM/KG 28W C

Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport This substance is considered to be nonhazardous for transport.

IATA

Non-Hazardous for Air Transport Non-hazardous for air transport.

Section 15 - Regulatory Information

EU Additional Classification

Safety Statements S: 22 24/25

Do not breathe dust. Avoid contact with skin and eyes.

US Classification and Label Text

US Statements

Caution: Avoid contact and inhalation. Target organ(s): Lungs.

United States Regulatory Information

SARA Listed: No

TSCA Inventory Item: Yes

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. SigmaAldrich Inc., shall not be held liable for any damage resulting from handling or form contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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