Thermo Fisher SCIENTIFIC

SAFETY DATA SHEET

Page 1 / 8 Revision Date 13-May-2024 Version 4

AI FAAA15795

Bentonite, sodium form

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: 皂土,钠盐形式

Product Description: Bentonite, sodium form

Cat No. : A15795

Supplier Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

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Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

SECTION 2. HAZARD IDENTIFICATION

Physical State Appearance Odor

No information evallable No information evaluable

Powder Solid No information available No information available

Emergency Overview

The product contains no substances which at their given concentration are considered to be hazardous to health.

Classification of the substance or mixture

Based on available data, the classification criteria are not met

Label Elements

None required

Prevention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P308 + P313 - IF exposed or concerned: Get medical advice/attention

Storage

P403 - Store in a well-ventilated place

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Page 2/8 Revision Date 13-May-2024

Bentonite, sodium form

Physical and Chemical Hazards

None identified.

Health Hazards

The product contains no substances which at their given concentration are considered to be hazardous to health.

Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %		
Bentonite	1302-78-9	95.5		
Quartz	14808-60-7	2.5		
Sodium carbonate	497-19-8	2		

SECTION 4. FIRST AID MEASURES

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Most important symptoms and effects

None reasonably foreseeable.

Self-Protection of the First Aider

No special precautions required.

Notes to Physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Page 3/8 Revision Date 13-May-2024

Bentonite, sodium form

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Environmental Precautions

Should not be released into the environment.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage

Keep container tightly closed in a dry and well-ventilated place.

Specific Use(s)

Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Component	China	Taiwan	Thailand	Hong Kong
Bentonite	TWA: 6 mg/m ³	-		-
Quartz	TWA: 0.7 mg/m ³ TWA: 0.3 mg/m ³ TWA: 1 mg/m ³ TWA: 0.5 mg/m ³ TWA: 0.2 mg/m ³	-	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³

Component	ACGIH TLV	OSHA PEL	NIOSH	The United Kingdom	European Union
Bentonite	TWA: 1 mg/m ³			-	
Quartz	TWA: 0.025 mg/m ³	(Vacated) TWA: 0.1 mg/m³ TWA: 50 µg/m³	IDLH: 50 mg/m³ TWA: 0.05 mg/m³	STEL: 0.3 mg/m³ 15 min TWA: 0.1 mg/m³ 8 hr Carc. respirable fraction	

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Exposure Controls

Engineering Measures

None under normal use conditions. .

Personal protective equipment

Eye Protection

Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Page 4/8 Revision Date 13-May-2024

Bentonite, sodium form

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Natural rubber	See manufacturers	-	EN 374	(minimum requirement)
Nitrile rubber	recommendations			
Neoprene				
PVC				

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

Respiratory Protection No protective equipment is needed under normal use conditions.

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

Hygiene MeasuresHandle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State Powder Solid

Odor No information available
Odor Threshold No data available

pH 9.5

Melting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/RangeNo information available

Flash Point No information available Method - No information available

Evaporation Rate Not applicable Solid

Flammability (solid,gas) No information available

Explosion Limits No data available

Vapor Pressure
No data available

Vapor DensityNot applicableSolidSpecific Gravity / DensityNo data available

Bulk Density
Water Solubility
Solubility in other solvents
No data available
No information available
No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature

No data available

No data available

Viscosity Not applicable Solid

Explosive PropertiesNo information available
No information available

Page 5 / 8 Revision Date 13-May-2024

Bentonite, sodium form

SECTION 10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.

Hazardous ReactionsNone under normal processing.Hazardous PolymerizationNo information available.

Conditions to Avoid None known.

Materials to avoid No information available.

Hazardous Decomposition Products Fumes of aluminum or aluminum oxide. Silicon dioxide. Carbon oxides. Sodium oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

(a) acute toxicity;

Toxicology data for the components

Component	LD50 Oral	LD50 Oral LD50 Dermal		
Bentonite	LD50 > 5000 mg/kg (Rat)			
Sodium carbonate	2800 mg/kg (Rat)	> 2000 mg/kg (rabbit)	2.3 mg/l 2h (Rat)	

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component EU		UK	Germany	IARC		
Quartz			Cat. 1	Group 1		

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs None known.

(j) aspiration hazard; Not applicable

Solid

Page 6 / 8 Revision Date 13-May-2024

Bentonite, sodium form

Symptoms / effects,both acute and No information available delayed

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Water Flea Freshwater Fish Freshwater Algae Microtox Component Bentonite LC50: = 19000 mg/L, 96h static (Oncorhynchus mykiss) Sodium carbonate Lepomis macrochirus: EC50: = 265 mg/L, 48h LC50: 300 mg/L/96h (Daphnia magna) Gambusia affinis: LC50: 740 mg/L/96h

Persistence and Degradability

Degradability

No information available

Not relevant for inorganic substances.

Bioaccumulative Potential No information available

Mobility in soil No information available

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused

Products

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

Contaminated Packaging Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

SECTION 14. TRANSPORT INFORMATION

Road and Rail Transport Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

Special Precautions for User No special precautions required

SECTION 15. REGULATORY INFORMATION

Page 7/8 Revision Date 13-May-2024

Bentonite, sodium form

International Inventories

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Japan (ISHL), Japan (ISHL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	goods GB	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Bentonite	-	-	Χ	Х	215-108-5	Х	X	Х	-		Χ	KE-02119
Quartz	-	-	Х	Х	238-878-4	Х	Х	Х	Χ	Х	Χ	KE-29983
Sodium carbonate	-	-	X	Х	207-838-8	Х	Х	Х	Х	X	Х	KE-31380

National Regulations

SECTION 16. OTHER INFORMATION

Prepared By Health, Safety and Environmental Department

Revision Date 13-May-2024

Revision Summary New emergency telephone response service provider.

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

Substances List

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment **LC50** - Lethal Concentration 50%

NOEC - No Observed Effect Concentration **PBT** - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% **POW** - Partition coefficient Octanol:Water **vPvB** - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate
VOC - (Volatile Organic Compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Physical hazards
Health Hazards
Calculation method
Environmental hazards
Cn basis of test data
Calculation method

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SAFETY DATA SHEET

Page 8 / 8 Revision Date 13-May-2024

Bentonite, sodium form

Disclaimer

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End of Safety Data Sheet