

## **SECTION 1. Identification of the substance/mixture and of the company/enterprise**

### **1.1. Product identifier**

Product name : MAJORBENTON UF

Product code: refer to sales department

Chemical Name: BENTONITE CAS: 1302-78-9 - EC No: 215-108-5

### **1.2. Relevant identified uses of the substance or mixture and uses advised against**

Clarifying Agents

Sectors of use:

Manufacture of food products[SU4]

Product category:

Process aid for food-limited use

Not recommended uses

Do not use for purposes other than those listed

### **1.3. Details of the supplier of the safety data sheet**

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#### **1.4. Emergency telephone number**

AEB SpA

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AEB OCEANIA PTY LTD

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## **SECTION 2. Hazards identification**

### **2.1. Classification of the substance or mixture**

CAS 1302-78-9 EINECS 215-108-5

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

None

Hazard Class and Category Code(s):

Non hazardous

Hazard statement Code(s):

Non hazardous

### **2.2. Label elements**

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):

None

Hazard statement Code(s):

Non hazardous

Supplemental Hazard statement Code(s):

EUH210 - Safety data sheet available on request.

Precautionary statements:

None in particular.

Contains:

Information concerning the components: bentonite.

Only for professional use. Food use. In accordance with current regulations on the specific matters.

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### 2.3. Other hazards

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

## SECTION 3. Composition/information on ingredients

### 3.1 Substances

No dangerous substance to report.

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
bentonite substance for which there are Community workplace exposure limits	100%			1302-78-9	215-108-5	

### 3.2 Mixtures

Irrilevant

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

Inhalation:

Ventilate the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:

Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product).:

Wash immediately and thoroughly with running water for at least 10 minutes.

Ingestion:

Not hazardous. It's possible to give activated charcoal in water or medicinal mineral vaseline oil.

### 4.2. Most important symptoms and effects, both acute and delayed

No data available.

### 4.3. Indication of any immediate medical attention and special treatment needed

No data available.

## SECTION 5. Firefighting measures

### **5.1. Extinguishing media**

Suggested extinguishing media:

Water spray, CO<sub>2</sub>, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing media to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

### **5.2. Special hazards arising from the substance or mixture**

No data available.

### **5.3. Advice for firefighters**

Use protection for the breathing apparatus

Safety helmet and full protective clothing.

The water spray can be used to protect the people involved in the extinction.

You may also use self-contained breathing apparatus, especially when working in confined and poorly ventilated areas and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

## **SECTION 6. Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear gloves and protective clothing

6.1.2 For emergency responders:

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provide a sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

### **6.2. Environmental precautions**

Contain spills

Inform the competent authorities.

Dispose of the waste material in compliance with the regulations

### **6.3. Methods and material for containment and cleaning up**

6.3.1 Containment:

Recover the product for reuse, if possible, or for elimination.

6.3.2 Cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

### **6.4. Reference to other sections**

Refer to paragraphs 8 and 13 for more information

## **SECTION 7. Handling and storage**

### 7.1. Precautions for safe handling

At work do not eat or drink.  
See also paragraph 8 below.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabelled containers.  
Keep containers upright and safe by avoiding the possibility of falls or collisions.  
Store in a cool and dry place, away from heat sources and direct exposure to sunlight.

### 7.3. Specific end use(s)

Manufacture of food products:  
Handle with care.  
Store in a clean, dry, ventilated area away from heat and direct sunlight.  
Keep container tightly closed.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

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Related to contained substances:

bentonite:

Occupational Exposure Limits in mg/m<sup>3</sup> 8 hours TWA – Respirable dust – in EU 27 + Norway & Switzerland\*

(inert)dust INHALABLE / (inert)dust RESPIRABLE

Austria	10/5
Belgium	10/3
Bulgaria	x/4
Cyprus	x/x
Czech Republic	x/x
Denmark	10/5
Estonia	x/x
Finland	10/x
France	10/5
Germany	10/0.5
Greece	10/5
Hungary	x/x
Ireland	10/4
Italy	10/3
Lithuania	x/10
Luxembourg	10/6
Malta	x/x
Netherlands	10/5
Norway	10/5
Poland	2/0.3
Portugal	10/5
Romania	x/10
Slovakia	10/x
Slovenia	x/x
Spain	10/
Sweden	x/5
Switzerland	x/6
UK	10/4

## 8.2. Exposure controls



Appropriate engineering controls:

Manufacture of food products:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

### 8.2.2 Individual protection measures:

#### (a) Eye / face protection

When handling the pure product use safety glasses (EN 166).

#### (b) Skin protection

##### (i) Hand protection

When handling the pure product use protective rubber or latex gloves , or other protective equipment, according to the instructions of the employer

##### (ii) Other

When handling the pure product, wear full protective clothing (generic workwear) or other protective equipment, according to the instructions of the employer.

#### (c) Respiratory protection

Not needed for normal use.

During manual operations in the event of insufficient ventilation, use a mask (UNI EN 149) with an FFP dust filter commensurate with the environmental hygienic conditions, unless otherwise specified by the employer.

#### (d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices and avoid to disperse the product into the environment.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Beige fine powder	
Odour	not determined as it is considered not relevant for the characterization of the product	
Odour threshold	not determined as it is considered not relevant for the characterization of the product	
pH	not determined as it is considered not relevant for the characterization of the product	
Melting point/freezing point	not determined as it is considered not relevant for the characterization of the product	

Physical and chemical properties	Value	Determination method
Initial boiling point and boiling range	not determined as it is considered not relevant for the characterization of the product	
Flash point	not determined as it is considered not relevant for the characterization of the product	
Evaporation rate	not determined as it is considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as it is considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as it is considered not relevant for the characterization of the product	
Vapour pressure	not determined as it is considered not relevant for the characterization of the product	
Vapour density	not determined as it is considered not relevant for the characterization of the product	
Relative density	0.45 ± 0.05 (20 ° C)	
Solubility	not determined as it is considered not relevant for the characterization of the product	
Water solubility	not determined as it is considered not relevant for the characterization of the product	
Partition coefficient: n-octanol/water	not determined as it is considered not relevant for the characterization of the product	
Auto-ignition temperature	not determined as it is considered not relevant for the characterization of the product	
Decomposition temperature	not determined as it is considered not relevant for the characterization of the product	
Viscosity	not determined as it is considered not relevant for the characterization of the product	
Explosive properties	not determined as it is considered not relevant for the characterization of the product	
Oxidising properties	not determined as it is considered not relevant for the characterization of the product	

### 9.2. Other information

No data available.

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

Inert

### 10.2. Chemical stability

Stable under normal conditions of use and storage

### 10.3. Possibility of hazardous reactions

No dangerous reaction

#### **10.4. Conditions to avoid**

Nothing to report

#### **10.5. Incompatible materials**

No one in particular

#### **10.6. Hazardous decomposition products**

No hazardous decomposition products

### **SECTION 11. Toxicological information**

#### **11.1. Information on toxicological effects**

ATE oral = ∞  
ATE dermal = ∞  
ATE inhal = ∞

(a) acute toxicity: bentonite: Ingestion - LD50 rat (mg / kg / 24h bw):> 2000

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): nd

Inhalation - LD50 rat (mg / l / 4h):> 5.27

(b) skin corrosion/irritation: bentonite: Not classified  
bentonite: Not irritating

(c) serious eye damage/irritation: bentonite: Not classified  
bentonite: Not irritating

(d) respiratory or skin sensitization: bentonite: Not classified

(e) germ cell mutagenicity: bentonite: Negative test (OECD 471, 473, and 476)

(f) carcinogenicity: bentonite: Not classified

(g) reproductive toxicity: bentonite: Two developmental studies are available: Abdel-Wahhab et al (1999): bentonite had no effect on maternal and fetal parameters at a dietary level of 0.5% w / w (equivalent to 250 mg / kg body weight) . Wiles et al (2004): 2% calcium montmorillonite or sodium montmorillonite in the diet had no effect on maternal weight or weight of maternal organs, weight of waste, embryonic implants or reabsorption. In both studies animals are not effects on maternal / fetal parameters have been detected. The classification for reproductive toxicity based on Regulation (EC) 1272/2008 is not guaranteed.

(h) specific target organ toxicity (STOT) single exposure: bentonite: No toxicity observed in acute tests.

(i) specific target organ toxicity (STOT) repeated exposure: bentonite: STOT Repeated exposure - Oral Short-term repeated dose (28 days) toxicity and sub-chronic toxicity (90 days) studies have been conducted on bentonite mice. Bentonite administered to mice at 10%, 25% or 50% for 61 days. The hepatoma was observed in mice treated with a 50% bentonite diet. This was due to the fact that the bentonite was a silicate with base exchange and therefore removed the choline from the contents of the intestine> Study of feeding for 200 days of 50% of bentonite. Hepatomas developed in 11 of 12 mice. The livers of mice with a basal 50/50 bentonite diet were severely damaged. The liver damage observed in the group that ingests bentonite is consistent with that expected during a prolonged deficiency of choline, a basic exchange silicate, is advanced as a partial explanation for the development of hepatomas in mice in these experiments. Effect observed on livers. However, studies have been conducted s

(j) aspiration hazard: bentonite: No risk of expected aspiration.

#### **Health Hazards:**

Eye contact: Accidental contact of product with eyes may cause irritation.

Skin Contact: Product is not an irritant. Prolonged or repeated contact may defeat and irritate the skin and cause dermatitis in some cases.

Ingestion: The ingested product may cause irritation of the mucous membranes of the throat and digestive system leading to digestive symptoms and abnormal bowel disorders.

Inhalation: Prolonged exposure to vapours or mists of product may cause respiratory irritation.



## SECTION 12. Ecological information

### 12.1. Toxicity

MAJORBENTON UF:  
C(E)L50 (mg/l) = 16000

Use according to good working practices and avoid to disperse the product into the environment.

### 12.2. Persistence and degradability

Not applicable

### 12.3. Bioaccumulative potential

Not applicable

### 12.4. Mobility in soil

Bentonite is almost insoluble and therefore has poor mobility in most soils.

### 12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

### 12.6. Other adverse effects

No other adverse effects were identified. According to the criteria of the European classification and labeling system, the substance does not require classification as dangerous for the environment.

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.  
Recover if possible. Operate according to local or national regulations

## SECTION 14. Transport information

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**14.1. UN number**

Not included in the field of application of regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

**14.2. UN proper shipping name**

None

**14.3. Transport hazard class(es)**

None

**14.4. Packing group**

None

**14.5. Environmental hazards**

None

**14.6. Special precautions for user**

No data available.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and IBC Code**

Transport in bulk is not foreseen

## SECTION 15. Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Restrictions relating to the product or contained substances (All. XVII Reg. EC 1907/2006): not applicable  
Substances in Candidate List (art. 59 Reg. EC 1907/2006): the product does not contain SVHC  
Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC  
Reg. EC 648/04: see 2.2  
Reg. (EU) n. 1169/2011: see 2.2

**15.2. Chemical safety assessment**

Chemical safety assessment was carried out by the supplier

## SECTION 16. Other information

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### 16.1. Other information

#### Main normative references:

Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of CHemicals) et seq.

Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq.

Regulation (EC) n. 648 of 31/03/04 (on detergents) et seq.

Regulation (UE) n. 1169/2011 (on the provision of food information to consumers)

Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.

Procedure used to classify under CLP mixture (Reg . EC 1272/2008): irrelevant

Training required: This document must be submitted to the employer to determine the possible need for appropriate training for workers to ensure protection of human health and the environment.

n.a.: not applicable

n.d.: not available

ADR: Accord européen relative au transport International des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ATE: Acute Toxicity Estimati

BFC: BioconCentration Factor

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstract Service number

CAP: Centre AntiPoison

CE/EC number EINECS (European Inventory of existing Commercial Substances) e ELINCS (European List of notified Chemical Substances)

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50

COD: Chemical Oxygen Demand

DNEL: Derived No Effect Level

EC50: half maximal Effective Concentration

ERC: Enviroment Release Classes

EU/UE: European Union

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient

NOEC: No Observed Effect Concentration

OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic

PC: Product Categories

PNEC: Predicted No Effect Concentration

PROC: Process Categories

RID: Règlement concernant le transport International ferroviaire des marchandises dangereuses (Regulations concerning International rail transport of dangerous goods)

STOT: Target Organ Systemic Toxicity

STOT (RE): Repeated Exposure

STOT (SE): Single Exposure

STP: Sewage Treatment Plants

SU: Sector of Use

SVCH: Substance of Very High Concern

TLV: Threshold Limit Value

vPvB: Very Persistent Very Bioaccumulative

#### References and Sources:

- ECHA Registered Substances:

- <https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>

- SDS supplier

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- GESTIS DNEL Database: <http://www.dguv.de/ifa/gestis/gestis-dnel-datenbank/index-2.jsp>
  - GESTIS International Limit Value: <http://limitvalue.ifa.dguv.de>

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\*\*\* this tab annuls and replaces any previous edition. (IIXX)

Changes to the previous edition: variation on basic physical and chemical properties.

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