

## Section 1 - Identification

|                     |  |
|---------------------|--|
| <b>Product Name</b> | <u>Bentonite powder</u>                      |
| <b>CAS No</b>       | 1302-78-9                                    |
| <b>Synonyms</b>     | tixoton; Southern bentonite; Bentonite magma |

|                                |  |
|--------------------------------|--|
| <b>Product Code</b>            | <b>B/1300/60</b>   |
| <b>Address</b>                 | ThermoFisher Scientific Australia Pty Ltd<br>5 Caribbean Drive, Scoresby<br>VICTORIA 3179, Australia |
| <b>Emergency Tel.</b>          | <b>CHEMTREC®</b><br><b>03 9757 4559 or +613 9757 4559</b>  |
| <b>Telephone / Fax Numbers</b> | Tel: 1300 735 292<br>Fax: 1800 067 639   |
| <b>E-mail address</b>          | ANZinfo@thermofisher.com   |

**Recommended Use** Laboratory chemicals.

**Uses advised against** This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list. This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

## Section 2 - Hazard(s) Identification

### Classification under Safe Work Australia

Classified as not hazardous according to criteria of Safe Work Australia.

**Physical hazards**  
No hazards identified

**Health hazards**  
No hazards identified

**Environmental hazards**  
No hazards identified

**Label Elements** None required

**Other information**  
No information available

## Section 3 - Composition and Information on Ingredients

| Component | CAS No    | Weight % |
|-----------|-----------|----------|
| Bentonite | 1302-78-9 | <= 100   |

## Section 4 - First Aid Measures

|  |   |
|--|---|
| <b>Inhalation</b>                          | Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.                      |
| <b>Ingestion</b>                           | Do NOT induce vomiting. Get medical attention.  |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.                       |
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| <b>Self-Protection of the First Aider</b>  | No special precautions required.  |
| <b>First Aid Facilities</b>                | Eyewash, safety shower and washroom.  |
| <b>Most important symptoms and effects</b> | . No information available  |
| <b>Notes to Physician</b>                  | Treat symptomatically.  |

## Section 5 - Fire Fighting Measures

### Suitable Extinguishing Media

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

### 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.

### Special protective equipment and precautions for fire fighters

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

### Emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Avoid contact with skin, eyes or clothing.

### Environmental Precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

### Methods for Containment and Clean Up

#### Clean-up methods - small spillage

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

#### Clean-up methods - large spillage

Not applicable, packaged goods.

**Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## Section 7 - Handling and Storage

**Precautions for Safe Handling**

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

**Conditions for Safe Storage, Including any Incompatibilities**

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

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

## Section 8 - Exposure Controls and Personal Protection

**Exposure limits**

**ACGIH** - Threshold Limit Values - Ceiling (TLV-C) guidelines by the American Conference of Governmental Industrial Hygienists (ACGIH) for controlling worker exposure to airborne chemical concentrations in the workplace.

| Component | Australia | New Zealand WEL | ACGIH TLV                | The United Kingdom | Germany |
|-----------|-----------|-----------------|--------------------------|--------------------|---------|
| Bentonite |           |                 | TWA: 1 mg/m <sup>3</sup> |                    |         |

**Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

**Exposure Controls****Engineering Measures**

None under normal use conditions.

**Personal protective equipment****Eye Protection**

Wear safety glasses with side shields (or goggles) (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial applications)

**Hand Protection**

Protective gloves

| Glove material | Breakthrough time | Glove thickness | AUS/NZ Standard | Glove comments        |
|----------------|-------------------|-----------------|-----------------|-----------------------|
| Nitrile rubber | See manufacturers | -               | AS/NZS 2161     | (minimum requirement) |
| Neoprene       | recommendations   |                 |                 |                       |
| Natural rubber |                   |                 |                 |                       |
| 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 compatibility, 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**

Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection**

Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use

**Recommended Filter type:** and maintenance of respiratory protective devices  
Particle filter (or AUS/NZ equivalent)

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

## Section 9 - Physical and Chemical Properties

### Information on basic physical and chemical properties

|  |                          |  |
|--|--------------------------|--|
| <b>Appearance</b>                              | Beige                    |  |
| <b>Physical State</b>                          | Solid                    |  |
| <b>Odor</b>                                    | Odorless                 |  |
| <b>Odor Threshold</b>                          | No data available        |  |
| <b>pH</b>                                      | No information available |  |
| <b>Melting Point/Range</b>                     | No data available        |  |
| <b>Softening Point</b>                         | No data available        |  |
| <b>Boiling Point/Range</b>                     | No information available |  |
| <b>Flash Point</b>                             | Not applicable           | <b>Method -</b> No information available |
| <b>Evaporation Rate</b>                        | Not applicable           | Solid                                    |
| <b>Flammability (solid,gas)</b>                | No information available |  |
| <b>Explosion Limits</b>                        | No data available        |  |
| <b>Vapor Pressure</b>                          | No information available |  |
| <b>Vapor Density</b>                           | Not applicable           | Solid                                    |
| <b>Specific Gravity / Density</b>              | No data available        |  |
| <b>Bulk Density</b>                            | No data available        |  |
| <b>Water Solubility</b>                        | Insoluble                |  |
| <b>Solubility in other solvents</b>            | No information available |  |
| <b>Partition Coefficient (n-octanol/water)</b> |                          |  |
| <b>Autoignition Temperature</b>                | No data available        |  |
| <b>Decomposition Temperature</b>               | No data available        |  |
| <b>Viscosity</b>                               | Not applicable           | Solid                                    |
| <b>Explosive Properties</b>                    | Not explosive            |  |
| <b>Oxidizing Properties</b>                    | Not oxidising            |  |

### Other information

## Section 10 - Stability and Reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                       | None known, based on information available                |
| <b>Stability</b>                        | Stable under normal conditions.                           |
| <b>Conditions to Avoid</b>              | Incompatible products, Excess heat, Avoid dust formation. |
| <b>Incompatible Materials</b>           | Strong oxidizing agents, Strong acids.                    |
| <b>Hazardous Decomposition Products</b> | None under normal use conditions.                         |
| <b>Hazardous Polymerization</b>         | No information available.                                 |

## Section 11 - Toxicological Information

## Information on Toxicological Effects

## Product Information

## (a) acute toxicity;

Oral

Based on available data, the classification criteria are not met

Dermal

No data available

Inhalation

No data available

| Component | LD50 Oral                 | LD50 Dermal | LC50 Inhalation |
|-----------|---------------------------|-------------|-----------------|
| Bentonite | LD50 > 5000 mg/kg ( 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

Possible cancer hazard. May cause cancer based on animal data The table below indicates whether each agency has listed any ingredient as a carcinogen

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs

No information available.

(j) aspiration hazard; No data available

## Other Adverse Effects

The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed No information available

## Section 12 - Ecological Information

## Ecotoxicity effects

Do not empty into drains. Do not flush into surface water or sanitary sewer system.

| Component | Freshwater Fish  | Water Flea | Freshwater Algae | Microtox |
|-----------|--|------------|------------------|----------|
| Bentonite | LC50: = 19000 mg/L,<br>96h static<br>(Oncorhynchus mykiss) |            |                  |          |

## Persistence and Degradability

## Persistence

Insoluble in water.

## Bioaccumulative Potential

May have some potential to bioaccumulate

## Mobility

Spillage unlikely to penetrate soil. Is not likely mobile in the environment due its low water solubility

## Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

## Persistent Organic Pollutant

This product does not contain any known or suspected substance

**Ozone Depletion Potential**

This product does not contain any known or suspected substance

## Section 13 - Disposal Considerations

**Waste from Residues/Unused Products**

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.

**Contaminated Packaging**

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

**Other Information**

Chemical wastes should be disposed through a licensed commercial waste collection service.

## Section 14 - Transport Information

**IMDG/IMO**

Not regulated

**ADG**

Not regulated

**IATA**

Not regulated

**Environmental hazards**

No hazards identified

**Special Precautions**

No special precautions required

**Additional information**

None known

## Section 15 - Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture****National Regulations****Australia**

See section 8 for national exposure control parameters.

**Standard for the Uniform Scheduling of Medicines and Poisons**

No poison schedule number allocated.

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

| Component             | Australian Industrial Chemicals Introduction Scheme (AICIS) | Additional information |
|-----------------------|---|------------------------|
| Bentonite - 1302-78-9 | Present   | -                      |

**Australian - Illicit Drug Precursors/Reagents Substance List**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

**Chemicals of Security Concern**

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

**National pollutant inventory** Not applicable

**Prohibition or notification/licensing requirements**

Shown below are details of specific prohibition/notifications or licensing requirements when they apply.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

**International Inventories**

| Component | AICS | NZIoC | EINECS    | ELINCS | TSCA | DSL | NDSL | PICCS | ENCS | ISHL | IECSC | KECL     |
|-----------|------|-------|-----------|--------|------|-----|------|-------|------|------|-------|----------|
| Bentonite | X    | X     | 215-108-5 | -      | X    | X   | -    | X     | -    |      | X     | KE-02119 |

**Legend:** X - Listed, '-' - Not Listed. **KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**International Regulations**

**Ozone Depletion Potential** This product does not contain any known or suspected substance

**Persistent Organic Pollutant** This product does not contain any known or suspected substance

**Rotterdam Convention (PIC)** Not applicable

**Basel convention on the control of transboundary movements of hazardous wastes and their disposal**

Not applicable.

| Component | CAS No    | OECD HPV | Restriction of Hazardous Substances (RoHS) | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|-----------|-----------|----------|--|---|--|
| Bentonite | 1302-78-9 | Listed   | Not applicable                             | Not applicable  | Not applicable   |

**Authorisation/Restrictions according to EU REACH** Not applicable

**Section 16 - Other Information****Legend**

**AICS** - Australian Inventory of Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**NZIoC** - New Zealand Inventory of Chemicals  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japanese Existing and New Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

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

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**NZS 5433:2012** - Transport of Dangerous Goods on Land

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**WEL** - Workplace Exposure Limit

**DNEL** - Derived No Effect Level

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**VOC** - (Volatile Organic Compound)

**KECL** - Korean Existing and Evaluated Chemical Substances

**CAS** - Chemical Abstracts Service

**ACGIH** - American Conference of Governmental Industrial Hygienists  
Predicted No Effect Concentration (PNEC)

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

**ADG** Australian Code for the Transport of Dangerous Goods by Road and Rail

**OECD** - Organisation for Economic Co-operation and Development

**LC50** - Lethal Concentration 50%

**ATE** - Acute Toxicity Estimate

**RPE** - Respiratory Protective Equipment

**NOEC** - No Observed Effect Concentration

**BCF** - Bioconcentration factor

**PBT** - Persistent, Bioaccumulative, Toxic

#### Key literature references and sources for data

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

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

#### Training Advice

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

#### Revision Date

18-Nov-2022

#### Revision Summary

Not applicable.

**This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).**

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

## End of Safety Data Sheet