

JNJ RESOURCES PTY LTD SPECIFICATION SHEET

Issue Date: 1.02 2007
Revision Date: 18.08.2021
Version number: 5

1. Identification

Product identifier JNJ RESOURCES® Fines
Other means of identification Synonyms Smectite * Bentonite * Bentonite, Sodian * Bentonite, Calcian * Sodium-activated Bentonite *Montmorillonite
CAS number 1302-78-9
Recommended use of the chemical and restrictions on use
Recommended use Bentonite has a variety of uses. It can be used as a rheology modifier, binding agent, adsorbent, hydraulic-barrier, and filler.
Restrictions on use Not available.
Details of manufacturer or importer:
Manufacturer:
Company name JNJ RESOURCES PTY LTD
Address 3167 Cunningham Hwy
WILLOWBANK
Website <http://www.jnjresources.com.au>
Telephone 0417 399 601
Emergency phone no: 0417 399 601 .
E-mail: admin@jnjresources.com.au

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.

Label elements, including precautionary statements

Hazard symbol(s) None.
Signal word None.
Hazard statement(s) Not available.
Precautionary statement(s)

Prevention Keep out of reach of children. Read label before use.
Response If medical advice is needed, have product container or label at hand.
Storage Store away from incompatible materials.
Disposal Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

Other hazards which do not result in classification None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Substance

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of Ingredients
BENTONITE	1302-78-9	100
Smectite		
Bentonite		
Bentonite, Sodian		
Bentonite, Calcian		
Sodium-activated Bentonite		
Montmorillonite		

Constituents Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of Ingredients
Calcium carbonate		
Calcium carbonate	471-34-1	
PRECIPITATED CALCIUM CARBONATE (PCC)		

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SMECTITE GROUP MINERALS

1318-93-0

Quartz

14808-60-7

<= 8

Crystalline silica, quartz
SILICA (QUARTZ)

Cristobalite

14464-46-1

<= 2

Bentonite is a UVCB substance sub-type 4. The purity of the product is 100 % w/w. Bentonite is composed mainly of smectite group minerals but the composition is varied, as expected for a UVCB substance, and other mineral constituents will be present in small and varying amounts. These minor constituents are not relevant for classification and labelling.

Composition comments Occupational Exposure Limits for constituents are listed in Section 8. The purity of the product is 100% w/w. Impurities are not applicable for a UVCB substance. This product contains less than 1% w/w RCS (respirable crystalline silica) as determined by the SWERF method. The respirable crystalline silica content can be measured using the SWERF method.

4. First-aid measures

Description of necessary first aid measures

Inhalation If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist. No specific first aid measures noted.

Skin contact Get medical attention if irritation develops and persists. No specific first aid measures noted. Wash skin with soap and water.

Eye contact No specific first aid measures noted. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion No specific first aid measures noted. Rinse mouth thoroughly. Get medical attention if any discomfort occurs.

Personal protection for first-aid responders No hazards which require special first aid measures. Provide general supportive measures and treat symptomatically.

Symptoms caused by exposure Dust in the eyes will cause irritation.

Medical attention and special treatment Provide general supportive measures and treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂). Use any media suitable for the surrounding fires.

Unsuitable extinguishing media Not applicable, non-combustible.

Specific hazards arising from the chemical The product itself does not burn.

Special protective equipment and precautions for firefighters Material can be slippery when wet.

Fire fighting equipment/instructions In the event of fire, cool tanks with water spray.

Hazchem Code None.

General fire hazards No unusual fire or explosion hazards noted. This material will not burn.

Specific methods Cool containers exposed to flames with water until well after the fire is out.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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For non-emergency personnel Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate personal protective equipment. Wear a dust mask if dust is generated above exposure limits. Avoid inhalation of dust from the spilled material. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

For emergency responders Avoid generation and spreading of dust. Avoid inhalation of dust. Wear a dust mask if dust is generated above exposure limits.

Environmental precautions Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up Collect dust using a vacuum cleaner equipped with HEPA filter. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water.

7. Handling and storage

Precautions for safe handling Minimise dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid breathing dust. Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Practice good housekeeping.

Conditions for safe storage, including any incompatibilities No special restrictions on storage with other products. Store in a dry area. Keep the container dry.

8. Exposure controls and personal protection

Control parameters Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Follow standard monitoring procedures.

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs) Constituents	Type	Value	Form
INERT OR NUISANCE DUSTS	TWA	4 mg/m ³	Respirable dust.
		10 mg/m ³	Inhalable dust.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Constituents	Type	Value	Form
INERT OR NUISANCE DUSTS	TWA	4 mg/m ³	Inhalable dust.
		0.3 mg/m ³	Respirable dust.

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines No exposure standards allocated.

Appropriate engineering controls Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection Use tight fitting goggles if dust is generated. Wear dust-resistant safety goggles where there is danger of eye contact.

Skin protection

Hand protection No protection is ordinarily required under normal conditions of use.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection Wear respirator with dust filter.

Thermal hazards Not applicable.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely

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wash work clothing and protective equipment to remove contaminants. Use good industrial hygiene practices in handling this material.

9. Physical and chemical properties

Appearance	Lump, granular or fine powder.
Physical state	Solid.
Form	Powder. Various.
Colour	Various.
Odour	None.
Odour threshold	Not applicable.
pH	8.5 - 11
Melting point/freezing point	> 450 °C (> 842 °F) / Not applicable.
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable.
Evaporation rate	Not available.
Flammability (solid, gas)	This product is not flammable.
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	Not applicable
Flammability limit – upper (%)	Not applicable
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	2.6 g/cm ³
Solubility(ies)	
Solubility (water)	< 0.9 mg/l
Partition coefficient (n-octanol/water)	Not applicable
Auto-ignition temperature	Not applicable.
Decomposition temperature	> 500 °C (> 932 °F)
Viscosity	Not applicable.
Viscosity temperature	Not applicable.
Other physical and chemical parameters	
Bulk density	0.9 - 1.4 g/cm ³
Explosive limit	Not applicable.
Explosive properties	Not explosive
Explosivity	Not applicable.
Flame extension	Not applicable.
Flammability	Not applicable.
Flammability (flash back)	Not applicable.
Flammability (Heat of combustion)	Not applicable
Flammability (Train fire)	Not applicable.
Flash point class	Not flammable
Molecular formula	UVCB Substance
Molecular weight	Not applicable.
Oxidising properties	None.
Percent volatile	0 %
pH in aqueous solution	8.5 - 11
Specific gravity	Not applicable.
VOC	0 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Will not occur.
Conditions to avoid	Moisture. Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

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Incompatible materials None known.
Hazardous decomposition products None.

11. Toxicological information

Information on possible routes of exposure

Inhalation Inhalation of dusts may cause respiratory irritation.
Skin contact Not classified.
Eye contact Dust in the eyes will cause irritation.
Ingestion Not classified.
Symptoms related to exposure None known.

Acute toxicity Not classified.

Product	Species	Test results
JNJ RESOURCES Granular (CAS 1302-78-9)		
Acute Inhalation		
<i>Dust</i> LC50	Rat	> 5.27 mg/l, 4 hr OECD 436
Oral		
<i>Dust</i> LD50	Rat	> 2000 mg/kg OECD 425

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Not classified.
Serious eye damage/irritation Dust in the eyes will cause irritation. Mild irritant to eyes (according to the modified Kay & Calandracriteria)

Respiratory or skin sensitisation

Respiratory sensitisation Not classified.
Skin sensitisation Not classified.
Germ cell mutagenicity Not classified.
Carcinogenicity In June 2003, SCOEL (the EU Scientific Committee on

Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. No carcinogenicity data available for this product. Sepiolite was evaluated by IARC as class 3 ("Cannot be classified as to carcinogenicity to humans"). Based on read-across with sepiolite, bentonite was assessed as non-carcinogenic. Therefore classification of bentonite for carcinogenicity is not warranted.

Reproductive toxicity Not classified.
Specific target organ toxicity - single exposure Not classified -
Specific target organ toxicity - repeated exposure Not classified
Aspiration hazard Not available.

12. Ecological information

Ecotoxicity Accumulation in aquatic organisms is expected. May cause long lasting harmful effects to aquatic life.

Product	Species	Test results
BENTONITE (CAS 1302-78-9)		
Aquatic		
Algae	EC50 Freshwater algae	> 100 mg/l, 72 hours
Crustacea	EC50 Coon stripe shrimp (<i>Pandalus danae</i>)	24.8 mg/l, 96 hours

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	Daphnia	> 100 mg/l, 48 hours
	Dungeness or edible crab (Cancer magister)	81.6 mg/l, 96 hours
Fish	LC50 Freshwater fish	16000 mg/l, 96 hours
	Marine water fish	2800-3200 mg/l, 24hr

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	Not relevant for inorganic substances
Bioaccumulative potential	Will not bio-accumulate.
Partition coefficient	Not applicable
n-octanol / water (log Kow)	
Mobility in soil	Low water solubility, expected to sink and migrate into the sediment. Expected to partition to sediment and wastewater solids.
Mobility in general	The product has poor water-solubility.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal methods Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Store containers and offer for recycling of material when in accordance with the local regulations.

14. Transport information

ADG Not regulated as dangerous goods.
RID Not regulated as dangerous goods.
IATA Not regulated as dangerous goods.
IMDG Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

Safety, health and environmental regulations

National regulations

- Australia Medicines & Poisons Appendix A**
Poisons schedule number not allocated.
- Australia Medicines & Poisons Appendix B**
BENTONITE (CAS 1302-78-9)
- Australia Medicines & Poisons Appendix D**
Poisons schedule number not allocated.
- Australia Medicines & Poisons Appendix E**
Poisons schedule number not allocated.
- Australia Medicines & Poisons Appendix F**
Poisons schedule number not allocated.
- Australia Medicines & Poisons Appendix G**
Poisons schedule number not allocated.
- Australia Medicines & Poisons Appendix H**
Poisons schedule number not allocated.
- Australia Medicines & Poisons Appendix I**
Poisons schedule number not allocated.
- Australia Medicines & Poisons Appendix J**

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Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 10

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9

Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)

BENTONITE (CAS 1302-78-9) 1000 - 9999 TONNES See the regulation for additional information.

Calcium carbonate (CAS 471-34-1) 1000 - 9999 TONNES See the regulation for additional information.

Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

INERT OR NUISANCE DUSTS (CAS SEQ250) 2000 TONNES/YR Threshold Category: 2B
 400 TONNES/YR Threshold Category: 2A

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No

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Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

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Further information

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Key abbreviations or acronyms used

SWERF = Size-Weighted Relevant Fine Fraction methodology is a scientific method developed to quantify the content of respirable particles within a bulk product. All details about the SWERF method are available at www.crystallinesilica.eu. UVCB = a substance of Unknown or Variable composition, Complex reaction products or Biological materials

References

For any information on literature references or toxicity/ecotoxicity studies, please contact the supplier.

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 manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use. 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. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information Product and Company Identification: Alternate Trade Names