(MATERIAL) SAFETY DATA SHEET

This Safety Data Sheet was created in accordance with the SWA National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)] and under the requirements of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

Date of Issue: Issue #3, revised December 2011 (valid for 5 years)
Replaces: Issue #2, revised January 2007

Trade Name: **BETTACLEAN**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product Name: **BETTACLEAN**
Unique Reference #: *121, 120 (Spill Kit)*
Other Names: Biohazard Infectious Waste Absorbent & Kit

1.2 Manufacturer Name: **Enretech Australasia Pty Limited** (A.B.N. 62-070 856 414)
P.O. Box 1154, Moss Vale, NSW 2577 Australia
Tel. 61 2 4869 3261, Fax. 61 2 4869 3264
Email: info@enretech.com.au, Internet: www.enretech.com.au

1.3 Recommended Use: A natural, organic super-absorbent product for the rapid absorption and encapsulation of potentially biohazard spills of any type such as blood, vomit, urine and faeces.

1.4 Emergency Tel. #: 61 (0)425 232 741
Product information (Monday – Friday, 8:00am – 10:00pm EST)

2. HAZARDS IDENTIFICATION

2.1 Statement of Hazardous Nature: Not classified as hazardous or dangerous in accordance with [NOHSC:1008 (2004)], HSIS [NOHSC:10005 (1999)], [ADG Code 7th Ed.].

2.2 Risk Phrases: Not hazardous. No criteria found.

2.3 Safety Phrases: S22, S25. Do not breathe dust. Avoid contact with eyes.

2.4 SUSMP Classification: *None Allocated.*

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance: Cellulosic by-product derived from cotton.
Content: 30-60%
CAS No.: 9004-34-6

3.2 Substance: Other Cellulosic materials
Content: 30-60%
CAS No.: Not Available

3.3 Substance: Proprietary Ingredients
Content: <10%
CAS No.: Not Available

4. FIRST AID MEASURES

4.1 Eye Contact: Hold eyes open, flooding with water for at least 15 minutes. Seek medical attention if irritation persist.

4.2 Skin Contact: If irritation or redness results from prolonged skin contact, seek medical attention.

4.3 Ingestion: Thoroughly rinse mouth with water. Drink a glass of water. Do not induce vomiting. If discomfort arises, seek medical attention.

4.4 Inhalation: If encountering respiratory difficulties, remove from dusty area and into fresh air, if possible. Seek medical attention if effects persist.

4.5 First Aid Facilities: Sterile eyewash solution for treatment of nuisance dusts.

4.6 Advice to Doctor: Treat symptomatically. May aggravate existing respiratory illness.

5. FIRE FIGHTING MEASURES

5.1 Suitable Extinguishing Media:

Suitable: Water spray, carbon dioxide or dry chemical powder.
Unsuitable: *No Restrictions.*

5.2 Hazards from Combustion Products:

Combustion by-products include carbon monoxide, carbon dioxide and carbon (soot).

5.3 Precautions for Fire Fighters and Special Protective Equipment:

Combustible solid but difficult to ignite. Not flammable under conditions of normal use (as per USEPA Test Method 1030). If burning, fire-fighters to treat as a wood fire.

5.4 Hazchem Code:

None Allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Emergency Procedures: Spills of this material do not pose a risk to health or the environment. Materials can be safely flushed to sewer or released to the environment. Fully biodegradable.

6.2 Methods and Materials for Containment and Clean Up Procedures

Wear appropriate protective equipment (See Section 8: Exposure Controls / Personal Protection) where significant exposure is possible. If cleaning residues with a vacuum cleaner, use HEPA rated vacuum.

Small Spills: Sweep up but avoid generating ambient dust.
Large Spills: Collect and place in clean, labelled containers for disposal.

7. HANDLING & STORAGE

7.1 Precautions for Safe Handling: Not classified as a dangerous good or hazardous substance. No special handling requirements necessary. If decanting material, avoid dust generation and ensure containers are adequately labelled. Do not eat, drink or smoke when handling this material. Always wash hands before eating and remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for Safe Storage: Observe storage instructions on container. Keep container in a dry, cool, ventilated area. Avoid dispersal of dust. Not to be stored near strong oxidisers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 National Exposure Standards:

NOHSC:1003(1995/2005):	10 mg/m^3 (cellulose – inspirable dust) (Australia)
OSHA-PEL:	15 mg/m^3 (cellulose – total dust), 5 mg/m^3 (cellulose – respirable dust)
ACGIH-TLV:	10 mg/m^3 (cellulose – total dust)

8.2 Biological Limits: No biological limit allocated.

8.3 Engineering Controls: No special ventilation is required under normal use. If handling large amounts of material in an enclosed area, the use of exhaust ventilation may be necessary to keep ambient dust levels as low as possible.

8.4 Personal Protective Equipment

Eye Protection: Eye protection not needed when handling sorbent alone. Wear eyeshield or safety glasses when using this product to clean up potentially biohazardous liquids.

Skin Protection: Gloves not needed when handling sorbent alone. Wear disposable nitrile gloves when using this product to clean up potentially biohazardous liquids.

Respiratory Protection: Dust mask not needed when handling sorbent alone. Wear disposable face mask when using this product to clean up potentially biohazardous liquids.

Other Protection: Other protective clothing not needed when handling sorbent alone. Wear disposable apron when using this product to clean up potentially biohazardous liquids.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	**Appearance:**	Brown, fibrous powder.
9.2	**Odour:**	None.
9.3	**pH:**	5-8 in water.
9.4	**Vapour Pressure:**	Not Applicable.
9.5	**Vapour Density:**	Not Applicable.
9.6	**Boiling Point:**	Not Applicable.
9.7	**Melting Point:**	Not Available. (deg. C @ 760 mm Hg)

9.8	**Solubility (in water):**	Insoluble.
9.9	**Density:**	0.36 g/mL

9.10 Additional Information

Flash Point:	*Not Available.*
Auto-Ignition Temp.:	*> 260 deg. C*
L.E.L.:	*50,000 mg/m^3 in air*
U.E.L.:	*Not Available.*
Percent Volatiles:	*None.*
Particle Size Range:	*Not Available.*
Flame Propagation:	*Does not propagate a flame (USEPA Method 1030).*

10. STABILITY & REACTIVITY

10.1	**Chemical Stability:**	Stable under normal and anticipated storage and handling conditions of temperature and pressure. Decomposition starts at 150 deg C.
10.2	**Conditions to Avoid:**	Not reactive under conditions of normal use.
10.3	**Incompatible Materials:**	As the sorbent is an organic material, it is incompatible with strong Oxidisers.
10.4	**Hazardous Reactions:**	Contact with strong oxidisers could result in ignition of sorbent. Will not polymerise.
10.5	**Hazardous Decomposition Products:**	None, when used and handled as intended.

11. TOXICOLOGICAL INFORMATION

11.1	**Acute Health Effects:**	Animal toxicity testing resulted in an estimated 96-hr LC50 value in excess of 100,000 mg/m^3 of air, indicating that the material is non-toxic. EPS 1/RM/10 (1990) method.
11.2	**Chronic Health Effects:**	No data available.

11.3 Health Effects from Likely Routes of Exposure:

Swallowed:	Unlikely as an exposure route. As the product is mostly natural cellulose, it is physiologically inert, and non-harmful if swallowed.
Eye:	Dust particles may cause mechanical irritation, resulting in redness.
Skin:	Absorption through skin not an exposure route. Unlikely to be a skin irritant. Repeated skin contact may cause redness. In some individuals, over-exposure may aggravate an existing medical condition, or skin sensitivity.
Inhaled:	Inhalation of high dust levels may cause irritation to the mucous membranes of the nose, throat and respiratory tract. Persons with a history of respiratory illness should not be exposed to conditions where exposure to significant levels of dust is likely.

12. ECOLOGICAL INFORMATION

12.1	**Ecotoxicity:**	Aquatic toxicity tests have been conducted as per ASTM D5560 test method (Microtox). The product alone has been shown to have low ecotoxicity. As it is an absorbent used for cleaning up oil spills, it has also been shown that the product lowers the ecotoxicity of the oil through absorption and encapsulation.
12.2	**Persistence / Degradability:**	Product is 100% biodegradable in 1-5 months under aerobic conditions.
12.3	**Mobility:**	Product itself is not mobile in soil and does not release any adverse leachate.
12.4	***Additional Information:***	*As the product is manufactured partly from agricultural by-products, it has been tested and found to not contain any pesticide residues. The product does not cause any adverse environmental effects and does not bioaccumulate.*

13. DISPOSAL CONSIDERATIONS

13.1	**Disposal Methods:**	This product is a mixture of natural cellulose materials and un-used product can either be discarded into regular garbage, incinerated by approved agents, or biodegraded via commercial composting. Empty product bags (paper or plastic) should be recycled. This product is designed to be used as an absorbent to clean up spilled liquids. Thus, the used product should be considered to have the same properties and risks as the liquid it has absorbed. In general, follow handling, disposal and decontamination criteria pertaining to the liquid absorbed.
13.2	**Special Precautions for Landfill or Incineration:**	Under normal circumstances, if the product has been used to absorb potentially biohazard liquids, such as blood or urine, all resulting wastes must be stored for eventual collection by a licensed waste contractor or incinerated as part of an infectious waste management program. Always consult your applicable Local Waste Management authority to ensure proper handling and disposal practices.

14. TRANSPORT INFORMATION

14.1	**UN Number:**	None Allocated.
14.2	**UN Proper Shipping Name:**	None Allocated.
14.3	**UN Class & Subsidiary Risk:**	None Allocated.
14.4	**UN Packing Group:**	None Allocated.
14.5	**Special Precautions for User:**	No special precautions required for transport.
14.6	**Hazchem Code:**	None Allocated.
14.7	***Export Information:***	*This product is currently exported from Australia. No export restrictions apply.*

15. REGULATORY INFORMATION

SUSMP Poisons Schedule Number:	None Allocated.
National Industrial Chemicals Notification & Assessment Scheme (NICNAS):	None Allocated.
Australian Pesticides & Veterinary Medicines Authority:	None Allocated.
Therapeutic Goods Administration (TGA):	None Allocated.
Food Standards Australia New Zealand (FSANZ):	None Allocated.

16. OTHER INFORMATION

This product is manufactured in Australia from specially treated organic fibres derived from assorted agricultural waste streams. The powder may contain naturally occurring bacteria and fungi indigenous to agricultural environments, however this product is regularly tested and does not contain any food pathogens or bacteria considered harmful to humans, flora or fauna. The product is fully biodegradable and contains 97% recycled content.

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ACRONYMS:

ADG	**Code Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition**
AICS	**Australian Inventory of Chemical Substances**
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code that provide information to emergency services
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
S-Phrase	Safety Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
SWA	Safe Work Australia, formerly ASCC and NOHSC
UN Number	United Nations Number

REFERENCES:

1. National Code of Practice for the Control of Workplace Hazardous Substances [NOHSC: 2007 (1994)], January 1994, SWA Canberra ACT
2. National Model Regulations for the Control of Workplace Hazardous Substances [NOHSC: 1005 (1994)], March 1994, SWA Canberra ACT
3. Australian Dangerous Goods Code, 7th Edition, National Road Transport Commission, Revised October 2011
4. National Standard for the Storage and Handling of Workplace Dangerous Goods, [NOHSC: 1015 (2001)], March 2001, SWA Canberra ACT
5. Approved Criteria for Classifying Hazardous Substances, 3rd Edition, [NOHSC: 1008 (2004)], April 2003 SWA, Canberra ACT
6. National Code of Practice for the Preparation of Material Safety Data Sheets, 2nd Edition, [NOHSC: 2011 (2003)], October 2004 SWA, Canberra ACT
7. Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC: 1003 (1995)] + Source A Updates 2005, August 2005, ASCC Canberra ACT
8. (Draft) National Standard for the Control of Workplace Hazardous Chemicals, September 2006, ASCC, Canberra ACT
9. The Globally Harmonised System of Classification and Labelling of Chemicals (GHS); ILO, Geneva (2011)
10. National Code of Practice for the Storage and Handling of Dangerous Goods, [NOHSC:2017 (2001)], March 2001, SWA Canberra ACT
11. Hazardous Substance Information System, updated December 2010, http://hsis.ascc.gov.au (replaces List of Designated Hazardous Substances, [NOHSC: 10005 (1999)], April 1999 ASCC, Canberra ACT)
12. Standard for the Uniform Scheduling of Medicines and Poisons, No. 2; August 2011, Published by the Australian Government under the Therapeutic Goods Act 1989.

ADVICE NOTE:

This Material Safety Data Sheet (MSDS) summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user must review this MSDS and consider the information in the context of how the product will be handled and used in the workplace. When used for liquid spill clean-up, sorbents tend to take on the characteristics of the liquid they have absorbed. Thus, always consult the MSDS of the spilled liquid prior to absorption with this product.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

End of MSDS