



MATERIAL SAFETY DATA SHEET PRODUCT NAME: SB100 - Sludge Buster PRODUCT PATENT No.: Rsa /Int.Patent Publication Number WO2011061596 A3 SECTION 1 Product and Company Identification **PRODUCT NAME: SB100** SYNONYMS: n/a PRODUCT CODES: Rsa /Int.Patent: Publication number WO2011061596 A3 MANUFACTURER: Bio Enforcement DIVISION: n / a ADDRESS: Unit 1, Floors Brand Street, Langebaan, 7357 EMERGENCY +27823459598 PHONE: +27 22 7720399 Office: +27 22 7720399 E MAIL: info@makroorganics.co.za CHEMICAL NAME: Stabilized - SB100 FAMILY: Plant Fibre Material CHEMICAL Herbal Material FORMULA: n/a PREPARED BY: Makro Organics Pty Ltd

SECTION 2 Composition Information and Ingredients

- Chemical Identity of the Pure Substance: n/a
- Common Names/ Synonym's: SB100 / Water Conditioner / under layer (substrate) conditioner / SB10 / SB100 / SB*
- CAS Number: n/a

SECTION 3 HAZARDS IDENTIFICATION Hazard Classification: NON DANGEROUS GOODS. Due to the small particles in this product it is classified as an irritant substance according to the APPROVED CRITERIA FOR CLASSIFYING HAZARDOUS SUBSTANCES [NOHSC:1008(2004)]:

"Xi" Irritant

Risk Phrases:

R42 May cause sensitisation by inhalation.
R43 May cause sensitisation by skin contact.

Safety Phrases:

- Do not breathe dust.
- Avoid contact with eyes.
- Wear suitable gloves.
- Use only in well-ventilated areas.

SECTION 4 FIRST AID MEASURES

Facilities should be available where this product is used, to carry out first aid procedures.

Description of Necessary First Aid Measures

Ingestion:

- Swallowing this product may cause immediate or delayed abdominal discomfort and potentially increase the risk of gastro-intestinal infections.
- The patient should be given water to drink and medical attention should be sought if any abdominal symptoms occur. Vomiting should not be induced, but if vomiting occurs, the patient should be leant forward or placed on their left hand side to maintain an open airway.

Eye:

- In the event that this material or the dust comes into contact with the eyes it may have an immediate or delayed irritating effect resulting in redness, watering and/ or infection.
- Eyes should be immediately and thoroughly flushed with lukewarm water for as long as necessary to alleviate the problem (or for at least 15 minutes).
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Removal of contact lenses after an eye injury should only be conducted skilled personnel.
- Professional medical assistance should be sought if symptoms persist.

Skin:

- Skin contact with this product and/or their dusts may lead to immediate or delayed skin irritations and in susceptible people skin sensitisation, dermatitis and/or skin infection.
- The affected areas should be washed thoroughly with mild soap and lukewarm water as quickly as possible.

Inhalation:

- Inhalation of dust from this product may have an immediate or delayed effect to irritate, inflame or sensitise the nose, throat and lungs, and exacerbate pre-existing conditions such as asthma and bronchitis.
- The repeated inhalation of dust from these products may lead to asthma, bronchitis, pneumonia or other pneumonia-like illnesses (e.g. Legionnaires disease). Children, pregnant women, the elderly, people with pre-existing conditions or the immuno-compromised, may be at a particular risk from these illnesses if exposed to this product. If an irritation occurs, the affected parties should be moved (or move themselves) away from the product or its dusts into a source of fresh air.
- The patient should be laid down, kept warm and be rested. Prostheses such as false teeth, which may block the airways, should be removed where possible prior to initiating first aid procedures.Professional medical attention should be sought if symptoms persist.

Specific Medical Attention and Treatment.

- There are no special treatments for mulch or SB100 made from recycled organics.
- Conditions should be treated symptomatically.
- All people who come into contact with this product should safeguard themselves adequately from tetanus.

SECTION 5 FIRE-FIGHTING MEASURES Suitable Extinguishing Media:

• Water or Class A extinguishers.

Hazards from Combustion Products:

• The product may combust or spontaneously self-combust in large stockpiles with internal temperatures around 75+ degrees Celsius. Temperatures should be monitored by your organisation and sufficient water should be soaked into the pile.

Precautions For Fire Fighters: No special precautions.

• Use standard and Special Protective Equipment: fire fighting equipment for Class A fires.

SECTION 6 ACCIDENTAL RELEASE MEASURES Emergency Procedures

In the event of a spill or release of the product from a transport vehicle or storage area in a sensitive environment including near water bodies:

- Advise the Roads & Traffic Authority (if a spill occurs from a transport vehicle)
- Advise the Department of Environment & Conservation
- Complete any necessary reports as advised:
- Advise the product supplier emergency contact:

Methods and Materials for Containment and Clean Up Procedures

• In the event of a spill or release of the product from a transport vehicle or storage area where bunding does not exist in order to contain and clean up:

Secure the site by:

- Covering the material with a sheet/ tarpaulin secured to the ground in order to protect against dust emissions.
- Bunding the area and cover drains to protect against over-ground runoff in waterways, surrounding land and drainage systems.
- Clean up the spill immediately once the site is secured. Avoid generating dust. Collect the material (using a vacuum system if required), load, transport and store all of the material released for use as planned or dispose of safely in a putrescible waste suitable landfill.
- Check the surrounding area to ensure all material has been captured. Collect all material if possible or seek Department of Environment and Conservation advice.

SECTION 7 HANDLING AND STORAGE Precautions for Safe Handling

When handling this material ensure that workers stay away from equipment that is moving and/ or processing exposed material and avoid coming into contact with the product by wearing:

- A suitable respiratory protective device, use and maintenance of respiratory protective devices. A Class P1 Particulate Respirator is typically most appropriate.
- Suitable gloves Occupational protective gloves. Standard duty leather/pigskin, rubber or neoprene gloves are typically most appropriate.
- Full length protective trousers and shirts (or overalls).
- Suitable boots for the site.
- Suitable eye protection recommended practices for occupational eye protection. Low impact goggles with indirect ventilation.

Additional handling procedures should include:

- Limit exposure to the product.
- Wash any areas of the body that the product may have come into contact after exposure.
- Launder protective work clothes prior to re-use.
- Check the atmosphere regularly against the relevant exposure standards (Section 8).
- Regularly vacuum enclosed areas where the product is used or install another a dust extraction system.
- Apply the material using a suitable garden or horticultural instrument.
- When handling this material ensure the environment is protected from releases by not moving the material / during adverse weather conditions such as wind and precipitation, bunding the handling area and providing wind breaks.

Conditions For Safe Storage:

• When storing this material: Protect stockpiles from wind and other adverse weather with a sheet/ tarpaulin or wind break secured to the ground.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION National Exposure Standards

No specific exposure standards have been allocated for mulches or under layer/ dam conditioners.

However due to the dust in the product, concentrations for monitoring exposure are provided by a number of standards as listed below:

Total Inhalable Dust

• 10mg/m3 (National Occupational Health & Safety Commission, 2004).

Total Respirable Dust

• 2mg/m3 (American Conference of Governmental Occupational Hygienists, 1986).

Biological Limit Values:

• No Biological Limit Allocated.

Engineering Controls:

• Use only in well-ventilated areas.

Personal Protection Equipment:

• Breathing masks (respirator), gloves, full length overalls, boots, safety glasses

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES Appearance:

- A rich brown humus & soil material/ with some fine particles and wood pieces.
- Odour: An earthy odour.
- pH: 6.8 7.9 in water.
- Vapour Pressure: Not Relevant.
- Vapour Density: Not Relevant.
- Boiling Point/ Range: Not Relevant.
- Freezing/ Melting Point: Not Relevant.
- Solubility: Not Soluble.
- Specific Gravity or Density: Sediment Conditioner 1.5 1.8 (cubic metres per tonne, m3/t).
- Mulch 2.3 2.7
- Flashpoint: Not Relevant.
- Information for Flammable Materials: Not Flammable.

SECTION 10 STABILITY AND REACTIVITY

- Chemical Stability: Stable.
- Conditions to Avoid: None.
- Incompatible Materials: None.
- Hazardous Decomposition Products: None.
- Hazardous Reactions: None.

SECTION 11 TOXICOLOGICAL INFORMATION Acute Health Effects

Ingestion:

- Ingestion is unlikely through normal use. However, swallowing any amount of this product may cause immediate or delayed abdominal discomfort and potentially increase the risk of gastro-intestinal infections.
- It is not recommended to repeatedly swallow this material.

Eye:

- In the event that any dose of this material or the dust comes into contact with the eyes it may have an immediate or delayed irritating effect resulting in redness and watering or an infection.
- It is not recommended to repeatedly allow this material to come into contact with the eyes.

Skin:

- Any level of skin contact with this product and/or their dusts may lead to immediate or delayed skin irritations and in susceptible people skin sensitisation, dermatitis or skin infection.
- It is not recommended for people susceptible to skin irritations to repeatedly allow this material to come into contact with the skin.

Inhalation:

 Inhalation of any amount of dust from this product may have an immediate or delayed effect to irritate, inflame or sensitise the nose, throat and lungs, and exacerbate preexisting conditions such as asthma and bronchitis. It is not recommended for people to repeatedly inhale this material.

Chronic Health Effects

- The repeated inhalation of dust from these products may lead to respiratory irritation, inflammation or sensitisation and illnesses such as asthma, bronchitis, pneumonia or other pneumonia-like illnesses (e.g. Legionnaires disease).
- Children, pregnant women, the elderly, people with pre-existing conditions or the immuno-compromised, may be at a particular risk from these illnesses if exposed to this product.
- It is not recommended to repeatedly swallow this material or repeatedly allow it to come into contact with the eyes.

SECTION 12 ECOLOGICAL INFORMATION ECOTOXICITY EFFECTS

- ACUTE TOXICITY: none known
- MOBILITY: not applicable

- PERSISTENCE AND DEGRADABILITY: none known
- BIOACCUMULATIVE POTENTIAL: is not known to accumulate

SECTION 13 DISPOSAL CONSIDERATIONS

WASTE TREATMENT:

Dispose of within current local and national regulations.

• No special method required.

PACKAGING TREATMENT:

Consult local governmental regulations regarding the proper disposal of emptied containers.

• RCRA HAZARD CLASS: n/a

SECTION 14 TRANSPORT INFORMATION

ROAD TRANSPORTATION

- PROPER SHIPPING NAME: Chemicals not otherwise indexed (NOI) Not Hazardous
- HAZARD CLASS: Not Regulated
- ID NUMBER: n / a
- LABEL STATEMENT: none

WATER TRANSPORTATION

- PROPER SHIPPING NAME: Chemicals Not Otherwise Indexed (NOI) Not Hazardous
- HAZARD CLASS: Not Regulated
- ID NUMBER: n / a
- LABEL STATEMENT: none

AIR TRANSPORTATION

- PROPER SHIPPING NAME: Chemicals Not Otherwise Indexed (NOI) Not Hazardous
- HAZARD CLASS: Not Regulated
- ID NUMBER: n / a
- LABEL STATEMENT: none

SECTION 15 REGULATORY INFORMATION

Preparation does not contain ingredients listed as a dangerous substance in Annex 1 of the EEC directive 67/548.

SECTION 16 OTHER INFORMATION: KEEP OUT OF REACH OF CHILDREN

Disclaimer:

Although the information and recommendations set forth in this sheet are believed to be correct as of the date hereof, Makro Organics (Pty) Ltd makes no representation as to the completeness or accuracy of such information and recommendations.

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