

makro organics



MATERIAL SAFETY DATA SHEET

Product Name **OxyTurf**

PRODUCT PATENT No.: Rsa /Int.Patent AppNo: WO2011061596A3

SECTION: Product and Company Identification

PRODUCT NAME: OxyTurf

SYNONYMS: n/a

PRODUCT CODES: Rsa /Int.Patent AppNo: 2009/08075

MANUFACTURER: Bio Enforcement SA

DIVISION: n / a

ADDRESS: Unit 1, Floors Brand Street, Langebaan, 7357

EMERGENCY +27 82 345 9598

Office: +27 22 736 2349

E MAIL: info@makroorganics.com

CHEMICAL NAME: Stabilized - OxyTurf

FAMILY: Plant Extract

CHEMICAL Herbal Extract

FORMULA: n/a

PREPARED BY: Makro Organics

SECTION 2: Composition Information and Ingredients

- HAZARDOUS INGREDIENTS None known.

- COMPONENTS All ingredients not precisely identified are proprietary.
- OSHA PEL: none
- ACGIH TLV: n/a
- DAFF Act 36 registration no.: exempt

SECTION 3: HAZARDS IDENTIFICATION EMERGENCY OVERVIEW:

POTENTIAL HEALTH EFFECTS

- Appearance: Light Caramel Colour Liquid
- Odour: No identifiable odour
- EYES: Irritation may occur
- SKIN: Irritation may occur after contact for extended period
- INGESTION: Excessive ingestion may cause nausea or gastrointestinal discomfort
- INHALATION: n / a
- ACUTE AND CHRONIC HEALTH HAZARDS: None known.
- MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Irritant

CARCINOGENICITY

- OSHA: n/a
- IARC: n/a
- ACGIH: n/a
- OTHER: n/a
- NTP: n/a

SECTION 4: FIRST AID MEASURES

- EYES: Flush eyes thoroughly with running water for 10 minutes while keeping the eyelids wide open.
- SKIN: Wash the affected area thoroughly with soap and water. Clean Clothing. Irritation will last for limited time only (5 - 10 minutes).
- INGESTION: Thoroughly rinse mouth with water. Drink plenty of fluids. Slight gastrointestinal discomfort may occur
- INHALATION: n/a

SECTION 5: FIRE-FIGHTING MEASURES

- SUITABLE EXTINGUISHING MEDIA: any
- EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS: none
- SPECIAL EXPOSURE HAZARDS IN A FIRE: none
- SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS none
- OTHER INFORMATION none

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **PERSONAL PRECAUTIONS:** Follow protective measures provided in sections 5 and 8
Keep away materials and products which are incompatible with product specified in section 10
- **ENVIRONMENTAL PRECAUTIONS:** Rinse spilled product to dilute areas of direct contact. The product will only benefit the natural environment if spilled.
- **METHODS FOR CLEAN UP:** Wear suitable clothing and protective equipment. Recover or mop up excess material and reuse wherever possible.

Absorb unusable product with suitable material and dispose of in accordance with Section 13.

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:

- 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).
- Apply the material using a suitable garden or horticultural instrument.

Conditions for Safe Storage

When storing this material:

- Store OxyTurf in a cool, dry environment.

- Ensure sufficient demarcation and signage to identify product.
- Bund the storage area.
- STORAGE Keep in a dry place
- Keep away from direct sunlight
- Keep away from heat
- Keep away from incompatible products specified in section 10
- Keep only in the original container at temperature not exceeding 30 degree Celsius If stored under warmer temperatures the life span of the product decreases.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- ENGINEERING CONTROLS: n/a
- VENTILATION: n/a
- RESPIRATORY PROTECTION: none required
- EYE PROTECTION: ANSI approved safety glasses with side protection or goggles.
- SKIN PROTECTION: Wear suitable protective clothing
- HYGIENIC PRACTICES: Handle in accordance with good hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES GENERAL INFORMATION

- APPEARANCE: Light Caramel Coloured Liquid
- ODOR: No identifiable odour

IMPORTANT HEALTH SAFETY AND ENVIRONMENTAL INFORMATION

- pH: Range 6.5 - 7.5
- BOILING POINT: 100°C
- FLASH POINT: not applicable
- MELTING POINT: not applicable

FLAMMABILITY

- (SOLID, GAS): non flammable
- EXPLOSIVE PROPERTIES: non-explosive
- VAPOR PRESSURE: not applicable
- VAPOR DENSITY: not applicable
- BULK DENSITY: n/a
- EVAPORATION
- RATE: not determined

SOLUBILITY IN WATER:

- DECOMPOSITION dispersible
- TEMPERATURE: not applicable
- VISCOSITY: Equivalent to water

- SPECIFIC GRAVITY 1.01
- Irritant: Slight Irritant after lengthy exposure

SECTION 10: STABILITY AND REACTIVITY

- STABILITY: Stable under normal conditions of use.
- CONDITIONS TO AVOID: none

INCOMPATIBILITY

- (MATERIAL TO AVOID): none
- HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: none known
- HAZARDOUS POLYMERIZATION: n/a
- CONDITIONS TO AVOID: heat and contamination of any kind

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA

- ACUTE ORAL TOXICITY: none known
- ACUTE INHALATION TOXICITY: none known
- TOXICITY: none known
- ACUTE DERMAL IRRITATION: none known
- SKIN IRRITATION: Slight Irritation after lengthy exposure
- EYE IRRITATION: slight, if direct contact with eyes
- SENSITIZATION: none
- CHRONIC TOXICITY n/a
- CARCINOGENIC DESIGNATION: none known

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY EFFECTS

- ACUTE TOXICITY: none
- 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) Non 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

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

Makro Organics shall in no event be responsible for any damages of whatsoever nature directly or indirectly resulting from the publication or use of or reliance upon such information and recommendations.

You are encouraged to advise anyone working with or exposed to such products of the information contained herein.

No Warranty, either expressed or implied, of merchantability or fitness or of any other nature with respect to the product or to the information and recommendations herein made hereunder.