MATERIAL SAFETY DATA SHEET

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier M101 - P-ISLAND

Product Use

BIOLOGICAL BASED DETERGENT BLOCK FOR URINALS

Manufacturer's Name

Pineland Environmental Technology

Street Address Unit B41

Pinelands Business Park

New Mill Road Pinelands Postal Code

Emergency Telephone

7450 082 924 5791

Date MSDS Prepared MSDS Prepared By Phone Number 01 MARCH 2013 DONAVIN HAWKER 021 532 3749

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Substance identifier	Conc. %	Symbols	R phrase	CAS No.	EC No.
Sodium Sulphate	60%	None listed	None Listed	77-82-6	
Sodium dodecylbenzene sulphonate	< 20%	Xn	22, 36/37/38	25155-30-0	286-680-4
Bacillus Subtillus spores	<0.5%				

Ingredients not listed are either nonhazardous or under reportable conditions

Hazardous ingredients: None known

None of the compounds are considered carcinogens by the National Toxicological Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration nor are they known to be mutagenic

SECTION 3 — HAZARDS IDENTIFICATION

CAUTION

Emergency Overview

Contact may cause inhalation irritation

Appearance Waxy blue Physical State Solid Odor Citrus

Potential Health Effects

Principal routes of exposure Eye contact, skin contact, ingestion

Acute effects

Eyes May cause irritation

Skin Possible allergic response in affected individuals to skin contact, or inhalation of dust from product.

Inhalation May cause irritation of respiratory tract

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting & diarrhea

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: Individuals with known allergies, particularly to feedstuffs as well as those individuals with chronic respiratory diseases or particular susceptibility thereto and those with asthmatic conditions should avoid contact with dusty conditions.

SECTION 4 — FIRST AID MEASURES

Skin Contact

In case of contact with skin, wash immediately with plenty of water

Eye Contact

In case of eye contact, rinse immediately with plenty of water & seek medical advice if irritation develops

Inhalation

Move to fresh air

Ingestion

Do not induce vomiting. Drink water to dilute. Seek medical advise

Organisms used are non-pathogenic, but may cause infection when in contact with open wounds.

Notes to physician

Treat symptomatically

SECTION 5 — FIRE FIGHTING MEASURES

Flammable Properties Predicted not flammable

Unsuitable extinguishing media None

Hazardous combustion products

Thermal decomposition products may release toxic and/or hazardous fumes and gases

including nitrogen dioxides, carbon dioxides

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions For personal protection, see section 8

Environmental precautions Take up by mechanical means preferably by vacuum cleaner equipped with a high efficiency filter. Flush

remainder carefully with plenty of water. Avoid splashing and high pressure washing (avoid formation of

aerosols). Ensure sufficient ventilation. Wash contaminated clothing

Method for cleaning up Spilled preparation should be removed immediately to avoid formation of dust from dried preparation.

Take up by mechanical means preferably by vacuum cleaner equipped with a high efficiency filter. Flush remainder carefully with plenty of water. Avoid splashing and high pressure washing (avoid formation of

aerosols). Ensure sufficient ventilation. Wash contaminated clothing

SECTION 7 — HANDLING AND STORAGE

Handling Ensure adequate ventilation

General precautions The substance should be handled under conditions of good industrial hygiene & in conformity with any local

regulations in order to avoid unnecessary exposure

Storage Keep tightly closed in a dry & cool place

Temperature Keep in a cool, dry & well ventilated place

Storage conditions In unbroken packaging – dry & protect from the sun. The product has been formulated for optimum stability.

Extended storage or adverse conditions such as higher temperatures or higher humidity may lead to a

higher dosage requirement

Conditions to avoid Avoid temperatures above 25C to preserve biological stability. Avoid freezing temperatures. Strong acids or

alkali compounds may inactivate biological cultures. Avoid strong oxidizing agents.

Incompatible materials Strong acids or alkali compounds may inactivate biological cultures

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

Maintain good conditions of industrial hygiene. Some processes may require enclosures, local exhaust ventilation or other engineering controls to control airborne levels. Additional handling

and health/safety information is available on request.

Personal protective equipment

Respiratory Protection In cases of insufficient ventilation wear suitable respiratory equipment that meets HEPA/P100

specifications.

Eye protection Safety glasses with side-shields

Skin protection Long sleeved clothing

Hand protection Protective gloves

General hygiene considerations Handle in accordance with good industrial hygiene and safety practices

Environmental exposure controlsLocal authorities should be advised if significant spills cannot be contained

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Appearance Waxy blue
Physical state Solid
Odor Citrus

pH 8 (at 1% solution @ 20°C)

Boiling point/Range N/A
Melting point/Range N/A
Flash point N/A

Flammability (solid/gas) No information available

Explosive propertiesNot predicted to be explosive based on chemical structure

Oxidising properties No information available

 Vapor pressure
 N/A

 Relative density
 N/A

 Solubility in water
 Soluble

 Partial Coefficient (noctanol/water)
 N/A

SECTION 10 — STABILITY AND REACTIVITY

Chemical Stability Stable under recommended storage conditions

Conditions to avoid Stable under normal conditions

Excessive temperature variations below 0C or above 25C.

Materials to avoid None

Hazardous decomposition products None

Possibility of Hazardous reactions None

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion, LD50 Rat oral (mg/kg)Not determinedInhalation, LC50 Rat inhalationNot determined

(mg/l/4hr)

Skin, LD50 Rat dermal (mg/kg)

Eye Irritation

Not determined

Not determined

Chronic Toxicity

Sensitization According to our experience and the information provided to us, the product does not have any

harmful effects if used and handled as specified

This product is formulated using a range of microorganisms specially selected from the natural environment

SECTION 12 — ECOLOGICAL INFORMATION

Ecotoxicity

This product is not expected to pose an environmental hazard. No toxicity data is available specifically for soil organisms, plants & terrestrial animals

Environmental Effects The data available do not support any environmental hazard

Persistence/Degradability

The organic compounds of the product are readily biodegradable

Bioaccumulative effect According to experience, not expected

Other adverse effects No known effect

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste disposal method Dispose of contents in accordance with local regulation

Contaminated packaging Dispose of wastes in an approved waste disposal facility

SECTION 14 — TRANSPORT INFORMATION

Transport Regulations Not dangerous goods

IMDG/IMO Not regulated RID Not regulated ADR Not regulated ICAO Not regulated

IATA Not regulated

DOT Not regulated

SECTION 15 — REGULATORY INFORMATION

Microbial classification

All the bacteria contained in this formulation are of group 1 according to Directive 2000/54/EC (on the protection of workers from risks related to exposure to biological agents at work). Microorganisms from group 1 are unlikely to cause a human disease. When handling the product, precautions described in Annex VI of Directive 2000/54/EC have to be taken into consideration in order to make a risk assessment.

Labelling according to Regulation (EC) n° 648/2004 (Detergent): to be declared

COMPONENT	QUANTITY (%)		
anionic agent	15-30		
Fragrance			
D-Limonene			
Citral			
Geraniol			
Citronellol			

SECTION 16 — OTHER INFORMATION

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information & belief at the date of publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text. Furthermore, as the conditions of use are beyond the control of Pineland Environmental Technology, it is the responsibility of the customer to determine the conditions of safe use of these products.

