



# SAFETY DATA SHEET

Revision date: 11/21/2014

Revision number: 2

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Name	BG MAX 3000
Product Code	7032711

### Recommended use of the chemical and restrictions on use

Recommended Use	Wastewater Treatment.
Uses advised against	Please refer to Product Data Sheet

### Details of the supplier of the Safety Data Sheet

Contact Manufacturer	Novozymes Biologicals Inc. 5400 Corporate Circle Salem, VA, USA 24153
Information Telephone Number	1-540-389-9361, 8am - 4:30pm EST M-F
Emergency Telephone Number	1-800-424-9300 (Chemtrec) 24 hours every day

## 2. HAZARDS IDENTIFICATION

### Classification

Classification of the product is in accordance with 29CFR 1910.1200

Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1

### Label elements

#### Emergency Overview

##### **Danger**

##### **Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled  
Causes serious eye irritation



**Appearance** Tan; free-flowing

**Physical State** Powder

**Odor** Slight fermentation odor

#### Precautionary Statements - Response

<b>Eyes</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
<b>Skin</b>	IF ON SKIN: Gently wash with plenty of soap and water
<b>Inhalation</b>	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
<b>Ingestion</b>	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

#### Precautionary Statements - Storage

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

#### Precautionary Statements - Disposal

Dispose of unused product and container in accordance with all applicable local and regional requirements

#### Hazards not otherwise classified (HNOC)

Not Applicable

#### Other Information

Health Hazard	1
Fire Hazard	1
Reactivity	0

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Pasteurized Bran	Not Applicable	25-30
Sodium sulphate	7757-82-6	15-20%
Sand	Not Applicable	15-20%
Gluco-amylase	9032-08-0	5-10%
Protease (Subtilisin)	9014-01-1	1-5%
Cellulase	9012-54-8	1-5%
Polyethylene glycol	25322-68-3	1-5%
Titanium dioxide	13463-67-7	1-5%
Yeast	Not Applicable	1-5%
Viable Bacteria Cultures	Not Applicable	1-5%
Viable Fungal Cultures	Not Applicable	1-5%
Lipase	9001-62-1	< 1.0%
Alpha-amylase	9000-90-2	< 0.05%

\* The exact percentage (concentration) of composition has been withheld as a trade secret

GHS Classification of Enzymes is based on AEP content. The above figure does not represent total AEP in the product.

### 4. FIRST AID MEASURES

#### First aid measures

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water. Consult a physician if irritation develops..
<b>Inhalation</b>	Move to fresh air. If symptoms of irritation and/or sensitization occur (shortness of breath, wheezing or laboured coughing) seek medical attention..
<b>Ingestion</b>	Rinse mouth with water. Do not induce vomiting. Drink water to dilute. Seek Medical advice. Consult a physician.

#### Most important symptoms and effects, both acute and delayed

**Main Symptoms** No information available

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Specific Hazards Arising from the Chemical

May cause allergic respiratory reaction.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Ensure adequate ventilation

**Environmental precautions**

**Environmental Precautions** Spilled preparation should be removed immediately to avoid formation of dust from dried preparation. Take up by mechanical means preferably by a 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.

**Methods and material for containment and cleaning up**

**Methods for Clean-up** Pick up and transfer to properly labelled containers

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place

**Packaging Material** There could be many packaging types for the product. The details are given in other Novozymes documents

**Incompatible Materials** Strong acids or alkali compounds and strong oxidizing agents may inactivate biological cultures

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Pasteurized Bran Not Applicable	-	-	-
Sodium sulphate 7757-82-6	-	-	-
Sand Not Applicable	-	-	-
Gluco-amylase 9032-08-0	-	-	-
Protease (Subtilisin) 9014-01-1	Ceiling: 0.00006 mg/m <sup>3</sup> Ceiling (as crystalline active enzyme, listed under Subtilisins)	-	-
Cellulase 9012-54-8	-	-	-
Polyethylene glycol 25322-68-3	-	-	-
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup> TWA	TWA: 15 mg/m <sup>3</sup>	5000 mg/m <sup>3</sup>

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Yeast Not Applicable	-	-	-
Viable Bacteria Cultures Not Applicable	-	-	-
Viable Fungal Cultures Not Applicable	-	-	-
Lipase 9001-62-1	-	-	-
Alpha-amylase 9000-90-2	-	-	-

**Appropriate engineering controls****Individual protection measures, such as personal protective equipment**

**Eye Protection** Avoid contact with eyes

**Skin and body protection** No special technical protective measures are necessary

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practices

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

**Physical State** Powder  
**Appearance** Tan; free-flowing  
**Odor** Slight fermentation odor  
**Odor Threshold** No information available

<b>Property</b>	<b>Values</b>
<b>Melting/freezing point</b>	No information available
<b>Evaporation rate VALUE</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Burning rate 100mm VALUE</b>	No information available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	No information available
<b>Specific Gravity</b>	No information available
<b>Water Solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition Coefficient (n-octanol/water)</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity of Product</b>	No information available
<b>Viscosity</b>	No information available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available

**Other Information**

**Softening Point** No information available  
**VOC Content** No information available  
**Density** No information available

**10. STABILITY AND REACTIVITY****Reactivity**

**10. STABILITY AND REACTIVITY**

No data available

**Chemical stability**

Stable under recommended storage conditions

**Possibility of Hazardous Reactions**

None under normal processing

**Conditions to avoid**

Excessive temperature variations below 32F or above 155F. Stable under normal conditions.

**Incompatible materials**

Strong acids or alkali compounds and strong oxidizing agents may inactivate biological cultures

**Hazardous Decomposition Products**

None.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

<b>Inhalation</b>	There is no data available for this product
<b>Eye contact</b>	Contact with eyes may cause irritation
<b>Skin contact</b>	Prolonged or repeated contact may dry skin and cause irritation
<b>Ingestion</b>	Ingestion may cause stomach discomfort

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium sulphate 7757-82-6	Oral LD50 Rat: >10000 mg/kg	Oral LD50 Rat: >10000 mg/kg	Oral LD50 Rat: >10000 mg/kg
Protease (Subtilisin) 9014-01-1	Oral LD50 Rat: 3700 mg/kg	Oral LD50 Rat: 3700 mg/kg	Oral LD50 Rat: 3700 mg/kg
Polyethylene glycol 25322-68-3	28 g/kg Rat 20 g/kg Rabbit	28 g/kg Rat 20 g/kg Rabbit	28 g/kg Rat 20 g/kg Rabbit
Titanium dioxide 13463-67-7	Oral LD50 Rat: >10000 mg/kg	Oral LD50 Rat: >10000 mg/kg	Oral LD50 Rat: >10000 mg/kg
Alpha-amylase 9000-90-2	Oral LD50 Rat: 7500 mg/kg	Oral LD50 Rat: 7500 mg/kg	Oral LD50 Rat: 7500 mg/kg

**Information on toxicological effects****Symptoms** No information available**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization** No information available**Mutagenic Effects** No information available

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	A1 A2 A3	Monograph 93 posted, Monograph 47 [1989]		X

**Reproductive Effects**

No information available

**Specific target organ systemic toxicity (single exposure)**

No information available

**Specific target organ systemic toxicity (repeated exposure)**

No information available

**Chronic Toxicity**

No information available.

Aspiration hazard

No information available

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

None known

Chemical Name	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium sulphate 7757-82-6				EC50 = 2564 mg/L 48 h EC50 = 4547 mg/L 96 h

**Persistence/Degradability**

The organic components of the product are biodegradable.

**Bioaccumulation/ Accumulation**

No information available

**Other adverse effects**

No known effect

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Waste Disposal Method**

Dispose of contents/container in accordance with local regulation.

**Contaminated Packaging**

Dispose of wastes in an approved waste disposal facility.

**14. TRANSPORT INFORMATION****DOT** Not regulated**TDG** Not regulated**MEX** Not regulated**ICAO** Not regulated**IATA** Not regulated**IMDG/IMO** Not regulated**RID** Not regulated**ADR** Not regulated**ADN** Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

#### Legend:

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

### Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and 40 CFR Part 372.

#### SARA 311/312 Hazardous

##### Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

#### State Right-to-Know

##### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not Applicable

## 16. OTHER INFORMATION

**Revision date:** 11/21/2014

#### **Revision Summary**

No information available

#### **Disclaimer**

The information provided on this SDS 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 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 Novozymes, it is the responsibility of the customer to determine the conditions of safe use of this preparation.

**End of SDS**