



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	BioRemove 5900
Product Code	7032792

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

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Emergency Overview

Appearance Tan; free-flowing	Physical State Powder	Odor Slight fermentation odor
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Precautionary Statements - Prevention

Wear eye/face protection. Use personal protective equipment as required. Wash hands and face thoroughly after handling.

Precautionary Statements - Response

Eyes	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Skin	IF ON SKIN: Gently wash with plenty of soap and water
Inhalation	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
Ingestion	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	90-95%

Sand	Not Applicable	5-10%
Viable Bacteria Cultures	Not Applicable	1-5%

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

4. FIRST AID MEASURES

First aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

Skin Contact Wash off immediately with soap and plenty of water

Inhalation Move to fresh air

Ingestion Clean mouth with water and afterwards drink plenty of water

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

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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	-	-	-
Sand Not Applicable	-	-	-
Viable Bacteria Cultures Not Applicable	-	-	-

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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Viscosity of Product	No information available
Viscosity	No information available
Explosive Properties	No information available
Oxidizing Properties	No information available

Other Information

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

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

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

Incompatible materials

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

Hazardous Decomposition Products

No information available

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

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

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
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

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

15. REGULATORY INFORMATION

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

Canada

WHMIS Statement

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

WHMIS Hazard Class

Non-controlled

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