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SAFETY DATA SHEET

Product Identifier: BioSelect Noir

Section 1 - PRODUCT and COMPANY IDENTIFICATION

1.1 Product Identifier

BioSelect Noir BIOSELECT-NOIR Product Name: Product Code(s):

Chemical Name:

Synonyms: Powder enzymatic preparation (enzymatic protein)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Intended Product Use: Biocatalyst for industry

Uses Advised Against: NA

1.3 Details of the supplier of the safety data sheet

Distributor: Gusmer Enterprises, Inc.

Postal Address: 81 M Street, Fresno, CA 93721 USA 1401 Ware Street, Waupaca, WI 54981 Telephone Number: (01)(559) 485-2692 [USA] (product info) (01)(715) 258-5525 [USA] (product info) Hours of Operation: Monday - Friday 8:00am-5:00pm PST Monday - Friday 8:00am-5:00pm CST

1.4 Emergency telephone number

Medical Emergency: 911 Chemical Emergency: (800) 424-9300

Section 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Sensitization - Respiratory category 1

2.2 Label Elements

Hazard Pictogram(s):



Signal Word: Danger

Hazard State

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements:

Avoid breathing dust, furne, mist, spray.

In case of inadequate ventilation wear respiratory protection.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a Poison center or doctor/physician.

Dispose of contents/ container in accordance with local regulations.

2.3 Emergency Overview

Appearance/Odor: Beige powder, slight odor of fermentation.

Other Hazards: The substance is not considered as a PBT or VPVB substance

Section 3 - COMPOSITION / INFORMATION on INGREDIENTS

| Ingredient(s) | Common Name & Synonyms | Percentage | CAS No. |
|--------------------------|--|----------------------------|-----------|
| Polygalacturonase | NA | 1-10% | 9032-75-1 |
| Pectine esterase | NA | 1-5% | 9025-98-3 |
| Pectine lyase | NA | 1-5% | 9033-35-6 |
| The other ingredients as | re not listed as they have no impact on th | e classification of the su | ıbstance. |

Section 4 - FIRST AID MEASURES

4.1 Description of the first aid measures

General Information: Protection of rescue workers: Wear appropriate individual protective equipment (see Section 8). Transport the affected person into the open air. Remove contaminated shoes and clothing.

Eve Contact: Rinse thoroughly in running water. Consult a doctor if symptoms develop.

Rinse thoroughly in running water. Remove contaminated shoes and clothing. Consult a doctor if symptoms develop. Skin Contact:

In the event of inhalation, take into the open air. Do not allow the person to get cold. Keep the victim resting in a semi-seated position. In the absence of breathing, use artificial respiration. Inhalation:

Consult a doctor

In the event of ingestion, rinse the mouth with water (only if the person is conscious). Consult a doctor if symptoms develop Ingestion: First Aid Facilities: Ensure that auto matic eye baths and safety showers are located close to the workstation

4.2 Most important symptoms and effects, both acute and delayed

May cause irritation of the eyes (redness)

Skin Contact: Prolonged or repeated contact with the skin may cause irritation.

Inhalation of drops or spray may cause irritation to the respiratory system. May entail sensitization via inhalation. Sensitive people may develop asthma following inhalation of this substance.

Ingestion: Ingestion of the product may entail gastrointestinal problems.

4.3 Indication of any immediate medical attention and special treatment needed Treatment: No special advice, treat symptomatically.

Section 5 - FIREFIGHTING MEASURES

5.1 Extinguishing Media

Small Fire: Use chemical powders or carbonic gas.
Major Fire: Use appropriate extinguishers for the surrounding materials

5.2 Special hazards arising from the substance or mixture

Unusual Risks of Fire/Explosion: No risk identified in the current state of knowledge.

Risk Linked to the Products of Thermal Breakdown: In the event of fire, may cause toxic and/or corrosive breakdown products.

5.3 Advice for firefighters

Special Measures to Combat Fire: A fire extinguishing network having been contaminated by this product must be kept in a closed environment and must not be spilled into the aquatic environment or any drain or

Protection of Participants: Wear appropriate protective clothing. Stand-alone isolating respiratory protection.



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Section 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency proceduresAvoid contact with the eyes, skin and clothing. Use appropriate protective equipment (see Section 8). Consult a specialist immediately.

6.2 Environmental precautions

6.3 Methods and materials for containment and cleaning up
Small Accidental Spillage or Leak: Avoid the formation of dust or spray. Mop up with appropriate material. Place in an appropriate container. Clean the area affected with plenty of water

Large Accidental Spillage or Leak: Avoid the formation of dust or spray. Prevent spillage into drains, subsoil or confined areas. Contain if necessary. Mop up the product spilled with inert material (e.g. dry sand or dry earth) and place in a chemical waste container. Recycle if possible

See Section 8 for appropriate personal protective equipment and section 13 for waste disposal

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Use in a closed circuit if possible. Use with adequate ventilation. Use appropriate protective equipment. Avoid any contact with the eyes, skin, respiratory system and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Store in a clean, dry place

7.3 Specific end use(s)

Substance intended to catalyze reactions by enzymatic means during industrial processes

Section 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Limits of professional exposure.

Engineering Controls: Use only in a well ventilated environment.

General Hygiene: Do not eat, drink or smoke during use. Wash your hands after handling these compounds and before eating, smoking or going to the toilet, and at the end of the day.

8.2 Exposure controls

Respiratory Protection: Wear a NIOSH approved N95 or greater respirator

Eve Protection: Full mask

Wear appropriate protective clothing.

Hand Protection: Wear appropriate gloves

Control of exposure linked to protection of the environment: Notify the local authorities if significant leaks cannot be contained. Wastewater must be evacuated to a purification plant.

The advice on personal protection is valid for high levels of exposure. Adapt personal protection according to the risk of exposure.

Section 9 - PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State: Powder.

Color: Beige.
Odor: Slight odor of fermentation. Odor:

Odor Threshold: No Data Available pH: 4 to 6 (concentration 1%).

Melting / Freezing
No Data Available Point (Specify):

Initial Boiling Point & Boiling Range: Flash Point: No Data Available

Evaporation Rate:

No Data Available Flammability (solid, gas): No Data Available

Explosive Limits: No Data Available

Vapor Pressure: No Data Available

Vapor Density: No Data Available

Relative Density: No Data Available

Soluble in water Solubility(ies):

Partition Coefficient (n. No Data Available

octanol/water):

Auto-ignition Temperature:

No Data Available
No Data Available

Decomposition No Data Available

Oxidizing Properties: No Data Available Viscosity: No Data Available

Section 10 - STABILITY and REACTIVITY

10.1 Reactivity No Data Available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions N/A under normal conditions of use.

10.4 Conditions to avoid

See Sections 5 and 7.

10.5 Incompatible materials

No special recommendations 10.6 Hazardous decomposition products

Does not break down under the stipulated conditions of handling and storage (see section 7).

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Section 11 - TOXICOLOGY INFORMATION

11.1 Information on toxicological effects Potential acute effects on health

Inhalation: May entail sensitization via inhalation. Ingestion: No information available.

No information available

Contact with the skin: No information available. Contact with the eyes: No information available.

Acute toxicity: Irritation/Corrosion

Sensitization

Potential chronic effects on the health

Chronic effects: Once sensitized, a strong allergic reaction may be triggered upon later exposure to very low levels. Carcinogenicity: Mutagenicity: No information available.

Teratogenicity: ts on development: Effects on fertility: No information available. No information available. No information available Chronic toxicity: No information available No information available. Carcinogenicity: No information available. Mutagenicity: No information available Teratogenicity:

Toxicity for reproduction: No information available.

Section 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

No information available

12.2 Persistence and degradability

No information available

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soilFor data on the physical state and solubility, see section 9.

12.5 Results of PBT and vPvB evaluations

See section 2.3

12.6 Other adverse effects
No information available.

Comments: The preparation is considered as non-hazardous for the environment, mobility, persistence, degradability, bioaccumulation potential, toxicity in the aquatic environment and other relative to eco-toxicity.

Section 13 - DISPOSAL CONSIDERATIONS

13.1 Methods of treating waste (residues, soiled packaging)

Dispose of waste in compliance with national/local environmental protection rules

Wastewater must be evacuated to a purification plant.

The waste code must be allocated by the user according to the application of the product.

Section 14 - TRANSPORTATION INFORMATION

UN Number: Not Applicable Class: Not Applicable Proper Shipping Name: Not Applicable Packing Group: Not Applicable Marine Pollutant: Not Applicable Other Applicable Information: Not Applicable

Section 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The substance complies with article 16 of regulation 689/2008 on the export and import of hazardous chemical products. It complies with regulation 882/3002 relative to the official controls undertaken to check conformity with the legislation on animal feed and foodstuffs and Regulation 178/2002 establishing the general principles and the general prescriptions of the food legislation instituting the European Food Safety Authority and fixing procedures on the safety of foodstuffs...

California Prop. 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

15.2 Evaluation of chemical safetyThe substance has not been subject to an evaluation of chemical safety.

ection 16 - OTHER INFORMATION

Product Names/Number(s):

BioSelect Noir: BIOSELECT-NOIR

Prepared By: Gusmer Enterprises, Inc. Name of Preparer: Eric Anderson

Title: Corporate Safety & Regulatory Manager

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GHS Hazard Warning Label

BioSelect Noir



DANGER:May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Avoid breathing dust, fume, mist, spray.

In case of inadequate ventilation wear respiratory protection.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a Polson center or doctor/physician.

Dispose of contents/ container in accordance with local regulations.

Gusmer Enterprises Inc.
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1401 Ware Street, Waupaca, WI 54981 (715) 258-5525
CONSULT SDS FOR ADDITIONAL INFORMATION ON HAZARD

V1.0