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### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	BioBlend® XP 24852 BioPolymer
Common Names	BioBlend® XP 24852
Product Use	BioPolymer Resin for blowing film, extrusion, or other conversion processes
Manufacturer	BiologiQ, Inc. 3834 Professional Way Idaho Falls, ID 83402

Emergency Number

1-208-357-9650

SECTION 2. HAZARDS IDENTIFICATION		
GHS Classification and Label Elements		
Category	Combustible Dust (OSHA Defined)	
Label Content		
Pictogram	Not required	
Signal word	WARNING	
Hazardous warning	May form combustible dust concentrations in air.	
Hazardous preventior measures	Not required	
Other Hazards		
Physical / Chemical Haza	S	
Combustible Dust	If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.	
Health Hazards		
Eye	H320: Causes eye irritation. Particles may cause mechanical irritation.	
Skin Contact	H316: Causes mild skin irritation. Only when hot.	
Inhalation	Low order of toxicity.	
Ingestion	No hazard in normal industrial use.	
Environmental Hazards	No significant hazard	
NFPA Hazard ID Health:	Flammability: 1 Reactivity: 0	
HMIS Hazard ID Health:	Flammability: 1 Reactivity: 0	

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#### SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS #	Concentration	GHS Hazard Codes
NuPlastiQ <sup>®</sup> BioPolymer		-	N/A
Adhesive Resin		-	N/A
Ethylene-1-octene copolymer	26221-73-8	-	N/A

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provision of paragraph (i).

SECTION 4. FIRST-AID MEASURES	
Eye Contact	Flush eyes with large amounts of water until irritation stops. Seek medical attention if irritation persists.
Skin Contact	Wash with soap and water.
	For hot product: immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.
Inhalation	Remove to fresh air. If symptoms continue, get medical attention.
Ingestion	Not a probable route of exposure. However, in case of accidental ingestion, call a physician.

SECTION 5. FIREFIGHTING MEASURES		
Extinguishing Media	Dry chemical; CO <sub>2</sub> ; Water fog; Foam	
Unsuitable Extinguishing Media	No applicable data available.	
Specific Hazards	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Do not permit dust to accumulate.	
Protective Equipment	Self-contained breathing apparatus.	
Decomposition products	Flammable hydrocarbons, incomplete combustion products, oxides of carbon, smoke, and fumes	
Flammability Properties		
Flash Point	No data	

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Flammability Limits	LEL: N/D	UEL: N/D	
Autoignition Temperature	N/A		

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Safeguards	Avoid the generation or accumulation of dust in the air. Good housekeeping practices should be used to avoid dust build up.
Spill Clean	Spilled material is a slipping hazard on hard surfaces.
	Sweep or scoop up pellets and remove.
	Spills of fine material should be cleaned using gentle sweeping or vacuuming. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.
<b>Environmental Precautions</b>	Do not discharge to streams, ponds, lakes or sewers.
Disposal Method	In accordance with existing local/state/federal regulations.

SECTION 7. HANDLING AND STORAGE		
Handling	Minimize dust generation and accumulation. Institute routine housecleaning to ensure dust does not accumulate on surfaces.	
	Pneumatic conveying and other mechanical handling operations can generate combustible dust. Avoid significant deposits of material which may become airborne and form combustible dust clouds. Handling and processing operations should be conducted in accordance with best practices (e.g. NFPA-654).	
	Electrostatic charge may build up during handling. Equipment should be grounded and bonded.	
Loading/Unloading Temperature	[Ambient]	
Transport Temperature	[Ambient]	
Transport Pressure	[Ambient]	
Storage	Store in cool dry place with adequate ventilation.	
Storage Temperature	[Ambient]	
Storage Pressure	[Ambient]	
Suitable Containers/Packing	Bulk Containers, Bags. Store sealed to prevent moisture absorption and decomposition.	

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#### **SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Exposure Limit Values for materials that can be formed when handling this product	For dusty conditions, OSHA recommends for particulates not otherwise regulated an 8-hour TWA of 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction); ACGIH recommends for insoluble and poorly soluble particles not otherwise specified an 8-hour TWA of 10 mg/m3 (inhalable particles), 3 mg/m3 (respirable particles). NOTE: Limits/standards shown for guidance only. Follow applicable regulations.
	Under recommended processing conditions, this material has been shown to emit elevated concentrations of glycerol mist (CAS 56-81-5). This may cause smoke and possible odor during processing. OSHA does not list Glycerol mist as a hazardous material with specific exposure limits.
Engineering Controls	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Processors of this product should assure that adequate ventilation or other controls are used to control exposure.
Personal Protection	
Hand Protection	If product is hot, thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, a long sleeve shirt or gauntlet style gloves is recommended.
Eye Protection	If contact with hot material is likely, safety glasses with side shields are recommended.
Skin and Body Protection	If there is a potential for contact with hot product, thermally protective clothing and footwear is recommended.
Respiratory Protection	If engineering controls, such as adequate ventilation and/or enclosures do not maintain acceptable airborne contaminate levels, an approved respirator may be appropriate. Typical type: Particulate air-purifying respirator approved for dust / oil mist is recommended.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

General Information / Appearance		
Physical State	Solid	
Form	Resin Pellets	
Туре	Mixture	

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Color	Opaque, off-white to tan
Odor	N/D
Odor Threshold	No data available
Important Health, Safety, and Envi	ironmental Information
Relative Density	N/A
pH as is	N/A
pH in 1% Solution	N/A
Boiling Point	N/A
Partition Coefficient	N/A
Specific Gravity	N/D
Evaporation Rate	N/A
Vapor Pressure (mm Hg)	N/A
Vapor Density	N/A
Volatiles	N/A
Volatile Organic Compounds	N/A
Auto ignition Temperature	N/A
Flammability (solid, gas)	May form combustible dust concentrations in air.
Flash Point	N/D
Upper Explosion Limit	N/D
Lower Explosion Limit	N/D
Decomposition Temperature	N/D
Oxidizing Properties	N/A
Viscosity	N/A
Other Information	
Freezing Point	N/A
Melting Temperature	N/A
Molecular Weight	>10,000
Solubility in Water	Low

SECTION 10. STABILITY AND REACTIVITY		
<b>Reactivity</b> 0 = Insignificant		
Stability	Material is stable under normal conditions.	
Conditions to Avoid	Avoid elevated temperatures for prolonged periods of time.	
Materials to Avoid	Strong Oxidizers	

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 Hazardous Decomposition Products
 This product does not undergo spontaneous decomposition.

 Hazardous decomposition products may include but are not limited to: Carbon dioxide (CO<sub>2</sub>), Carbon monoxide, Organic acids, Aldehydes, Alcohols, Acrolein, Formaldehyde, Acetaldehydes

SECTION 11. TOXICOLOGICAL INFORMATION		
Product Toxicology		
Oral Toxicity	Low order of toxicity	
	Single dose oral LD50 has not been determined.	
	Typical for this family of materials. LD50, Rat, > 5,000 mg/kg Estimated.	
Dermal Toxicity	No adverse effects anticipated by skin absorption.	
	The dermal LD50 has not been determined.	
	Typical for this family of materials. LD50, Rabbit, > 2,000 mg/kg Estimated.	
Inhalation Toxicity	No adverse effects are anticipated from single exposure to dust. The LC50 has not been determined.	
Eye Irritation	Mechanical irritation is possible.	
Chronic (Long-Term) Effects of Exposure		
Route of Entry	Eye, skin, inhalation, ingestion	
Effects of chronic exposure	None	
Target Organs	N/A	
Special Health Effects	None known	
Other Information		
Dust	May be irritating to the eyes and respiratory tract.	
Regulatory Lists Searched	NTP, IARC, OSHA CARC	

SECTION 12. ECOLOGICAL INFORMATION		
Ecotoxicity	N/D	
Biodegradability	N/D	

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Bioaccumulative potential	N/D
Mobility in soil	N/D

#### SECTION 13. DISPOSAL CONSIDERATIONS

<b>Disposal Recommendations</b>	
Waste Disposal Methods:	In accordance with existing federal/state/local environmental regulations.
Empty Containers:	Empty container may contain product residue; follow SDS and label warnings even after containers have been emptied.

#### SECTION 14. TRANSPORT INFORMATION

Land (DOT)	Not regulated for Land Transport
Sea (IMDG)	Not regulator for Sea Transport
Air (IATA)	Not regulated for Air Transport

SECTION 15. REGULATORY INFORMATION		
J.S. Regulations		
SARA 311/312 Reportable GHS Hazard Classes	Combustible Dust	
SARA 313 Title III	This material contains no chemicals with known CAS numbers that exceed the threshold levels required for reporting.	
TSCA Inventory List	The components listed in section 3 are in compliance with TSCA Inventory requirements for commercial purposes.	
State Regulations		
California Prop. 65	This product contains no known listed substances.	
International Inventories		
Canada DSL Inventory List	The components with known CAS numbers in Section 3 are listed.	
China inventory of Existing Chemical Substances list:	The components with known CAS numbers in Section 3 are listed.	

#### **SECTION 16. OTHER INFORMATION**

Created:

23 Jan 2023

Initial version

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N/D = Not determined, N/A = Not applicable

#### Key to the H-Codes contained in Section 3 of this document (for information only)

H316: Causes mild skin irritation. Only when hot.

H320: Causes eye irritation. Particles may cause mechanical irritation.

This SDS covers the following BioBlend® XP BioPolymer: BioBlend® XP 24852.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance to safe handling, use, processing storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.