

# SAFETY DATA SHEET



Product Name: BioBlend® XP 24252  
Revision Date: 21 March 2023

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	BioBlend® XP 24252
Common Names	BioBlend XP
Product Use	Resin for blowing film
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 warnings	May form combustible dust concentrations in air.
Hazardous prevention measures	Not required

### Other Hazards

#### Physical / Chemical Hazards

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 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: 1	Flammability: 1	Reactivity: 0
HMIS Hazard ID	Health: 1	Flammability: 1	Reactivity: 0

# SAFETY DATA SHEET



Product Name: BioBlend® XP 24252  
Revision Date: 21 March 2023

## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS #	Concentration	GHS Hazard Codes
NuPlastiQ® GP BioPolymer		-	N/A
Adhesive Resin	9002-88-4	-	N/A
LLDPE	9002-88-4	-	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

<b>Eye Contact</b>	Flush eyes with large amounts of water until irritation stops. Seek medical attention if irritation persists.
<b>Skin Contact</b>	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.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Not a probable route of exposure. However, in case of accidental ingestion, call a physician.

## SECTION 5. FIREFIGHTING MEASURES

<b>Extinguishing Media</b>	Dry chemical; CO <sub>2</sub> ; Water fog; Foam
<b>Unsuitable Extinguishing Media</b>	No applicable data available.
<b>Specific Hazards</b>	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.
<b>Protective Equipment</b>	Self-contained breathing apparatus.
<b>Decomposition products</b>	Flammable hydrocarbons, Hydrogen fluoride, Incomplete combustion products, Oxides of carbon, Smoke, Fume
<b>Flammability Properties</b>	
Flash Point	No data
Flammability Limits	LEL: N/D UEL: N/D
Autoignition Temperature	N/A

# SAFETY DATA SHEET



Product Name: BioBlend® XP 24252  
Revision Date: 21 March 2023

## SECTION 6. ACCIDENTAL RELEASE MEASURES

<b>Safeguards</b>	Avoid the generation or accumulation of dust in the air. Good housekeeping practices should be used to avoid dust build up.
<b>Spill Clean</b>	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.
<b>Disposal Method</b>	In accordance with existing local/state/federal regulations.

## SECTION 7. HANDLING AND STORAGE

<b>Handling</b>	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).
Loading/Unloading Temperature	[Ambient]
Transport Temperature	[Ambient]
Transport Pressure	[Ambient]
<b>Storage</b>	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.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure Limit Values for materials that can be formed when handling this product</b>	For dusty conditions, OSHA recommends for particulates not otherwise regulated an 8-hour TWA of 15 mg/m <sup>3</sup> (total dust), 5 mg/m <sup>3</sup> (respirable fraction); ACGIH recommends for insoluble and poorly soluble particles not
--	---

# SAFETY DATA SHEET



Product Name: BioBlend® XP 24252  
Revision Date: 21 March 2023

	<p>otherwise specified an 8-hour TWA of 10 mg/m<sup>3</sup> (inhalable particles), 3 mg/m<sup>3</sup> (respirable particles). May contain cristobalite, a form of crystalline silica, as an additive that is encapsulated in the polymer. Inhaled crystalline silica in an occupational environment is recognized as a known human carcinogen. However, the potential for release of silica to the air when this polymer is handled has been assessed and the encapsulated silica within the polymer is not expected to pose a health hazard when processed under normal conditions of use. NOTE: Limits/standards shown for guidance only. Follow applicable regulations.</p> <p>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.</p>
<b>Engineering Controls</b>	Adequate ventilation should be provided so that exposure is minimized during processing.
<b>Personal Protection</b>	
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 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

# SAFETY DATA SHEET



Product Name: BioBlend® XP 24252  
Revision Date: 21 March 2023

Type	Mixture
Color	Opaque, off-white to tan
Odor	N/D
Odor Threshold	No data available
<b>Important Health, Safety, and Environmental Information</b>	
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
<b>Other Information</b>	
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
<b>Stability</b>	Material is stable under normal conditions.
<b>Conditions to Avoid</b>	Avoid elevated temperatures for prolonged periods of time

# SAFETY DATA SHEET



Product Name: BioBlend® XP 24252  
Revision Date: 21 March 2023

<b>Materials to Avoid</b>	Strong oxidizers
<b>Hazardous Decomposition Products</b>	This product does not undergo spontaneous decomposition.  Typical combustion products may include CO, CO <sub>2</sub> , C, N, H <sub>2</sub> O

## SECTION 11. TOXICOLOGICAL INFORMATION

<b>Product Toxicology</b>	
Oral Toxicity	Low order of toxicity
Dermal Toxicity	Non-hazardous
Inhalation Toxicity	Non-hazardous
Eye Irritation	Non-hazardous
<b>Chronic (Long-Term) Effects of Exposure</b>	
Route of Entry	Eye, skin, inhalation, ingestion
Effects of chronic exposure	None
Target Organs	N/A
Special Health Effects	None known
<b>Other Information</b>	
Dust	May be irritating to the eyes and respiratory tract.
Additives	Contains additives that are encapsulated in the polymer. Under normal processing conditions, the additives are not expected to pose any health hazard. However, grinding of the polymer is not recommended without the use of appropriate measures to control exposure.
<b>Regulatory Lists Searched</b>	NTP, IARC, OSHA CARC

## SECTION 12. ECOLOGICAL INFORMATION

<b>Biodegradability</b>	N/D
<b>Incinerability</b>	Incinerable
<b>Toxic Volatiles</b>	None expected with complete combustion

## SECTION 13. DISPOSAL CONSIDERATIONS

<b>Disposal Recommendations</b>	
Waste Disposal Methods:	In accordance with existing federal/state/local environmental regulations.

# SAFETY DATA SHEET



Product Name: BioBlend® XP 24252  
Revision Date: 21 March 2023

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

### U.S. Regulations

Osha Hazard Communication Standard:	This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.
SARA 302:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
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.
CWA / OPA:	Plastic pellets are defined by the US EPA under the Clean Water Act (40CFR122.26) as a "significant material" which requires any industrial plant that may expose pellets to storm water to secure a storm water permit. Violations of the rule carry the same penalties as other Clean Water Act violations. Pellets found in storm water runoff are subject to EPA regulations with the potential for substantial fines and penalties.

### The following ingredients are cited on the lists below

Chemical Name	CAS Number	List Citations
1-PROPENE, 1,1,2,3,3,3-HEXAFLUORO POLYMER WITH 1,1-DIFLUOROETHENE	9011-17-0	2
SILICA, QUARTZ	14808-60-7	3
TALC	14807-96-6	5

# SAFETY DATA SHEET



Product Name: BioBlend® XP 24252  
Revision Date: 21 March 2023

Regulatory Lists Searched		
1 = OSHA Z	3 = CA P65	5 = NJ RTK
2 = TSCA	4 = CA RTK	

## SECTION 16. OTHER INFORMATION

Created: 21 Mar 2023 Initial version

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

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

H317: May cause allergic skin reaction; Skin Sensitization, Cat 1

H400: Very toxic to aquatic life: Acute Env Tox, Cat 1

H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1

This SDS covers the following BioBlend® XP BioPolymers: XP 24252.

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.