

# SAFETY DATA SHEET



Product Name: BioBlend® XD 28100 BioPolymer  
Product No: BioBlend® XD 28100  
Revision Date: 30 August 2022

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	BioBlend® XD 28100 BioPolymer
<b>Common Names</b>	BioBlend® XD
<b>Product Use</b>	Resin for extrusion
<b>Manufacturer</b>	<b>Headquarters</b> BiologiQ HK Room 401B, Energy Plaza, 92 Granville Road, Tsim Sha Tsui East, Kowloon, Hong Kong  <b>Manufacturing</b> Block F, Phase 2, Early Light Int. Group, No. 26 Muxi Ave., Xilian Town, Wujiang Dist., Shaoguan City, Guangdong Province, China
<b>Emergency Number</b>	86-751-8828888 ext 2545

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification and Label Elements

#### Hazard Classification

Acute toxicity	Not Classified
Skin Corrosion/ Irritation	Category 2
Serious Eye Damage/Irritation	Category 2A
Respiratory sensitizer	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity(single exposure)	Not classified
Specific target organ toxicity(repeated exposure)	Category 2
Aspiration Hazard	Not classified

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## Label Content

Pictogram



Signal word

WARNING

Hazard Statements

May form combustible dust concentrations in air.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H373

Causes skin irritation.

H315

May cause damage to organs through prolonged or repeated exposure.

## Precautionary Statements

Prevention

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

P264

Wash thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302+P352

IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P314

Get medical advice/attention if you feel unwell.

Storage

Not applicable

Disposal

P501

Dispose of contents/container in accordance with local/regional/national/international regulation.

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## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS #	Concentration
NuPlastiQ® BioPolymer		-
Styrene-Butadiene-Styrene Polymer	9003-55-8	-
White mineral oil (petroleum)	8042-47-5	-
Calcium Carbonate	1317-65-3	-
Adhesive Resin		-
Other additives		-

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>	Water jet.
<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>	CO <sub>2</sub> , toxic gas, smoke and carbon oxides
<b>Flammability Properties</b>	

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Flash Point	No data
Flammability Limits	LEL: N/D UEL: N/D
Autoignition Temperature	N/A

## 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 government 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. Do not store near heating source.
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

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## Exposure Limit Values for materials that can be formed when handling this product

When hot processing this material, use local and/or general exhaust ventilation to maintain the concentration of vapors and fumes below exposure limits. Local exhaust ventilation is preferred. Use static controls. Static charges can cause explosions in solvent and dust laden atmospheres. Follow processing recommendations on the product data sheet.

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 otherwise specified an 8-hour TWA of 10 mg/m<sup>3</sup> (inhalable particles), 3 mg/m<sup>3</sup> (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 insure that adequate ventilation is provided to control and minimize exposure. Dust control equipment, exhaust ventilation, and material transport systems involved in handling of this product should be designed and maintained to minimize dust generation and accumulation.

## 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.

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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
Type	Mixture
Color	Opaque, off-white to tan
Odor	N/D
Odor Threshold	No data available

### Important Health, Safety, and Environmental 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	1.14
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

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## 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
<b>Stability</b>	Material is stable under normal conditions.
<b>Conditions to Avoid</b>	Avoid elevated temperatures for prolonged periods of time
<b>Materials to Avoid</b>	Strong acids, strong oxidizing agents, strong alkali.
<b>Hazardous Decomposition Products</b>	This product does not undergo spontaneous decomposition.  Exposure to high temperatures may cause decomposition. Possible decomposition products include: CO <sub>2</sub> , toxic gas, smoke and carbon oxides.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Product Toxicology

Acute toxicity	Proprietary Additive 1: Acute oral toxicity: LD <sub>50</sub> (rat) > 5000mg/kg Acute inhalation toxicity: LC <sub>50</sub> (rat) > 0.14mg/L Acute dermal toxicity: LD <sub>50</sub> (rabbit) > 5000mg/kg  Proprietary Additive 2: Acute oral toxicity: LD <sub>50</sub> (rat) > 5000mg/kg Acute inhalation toxicity: LC <sub>50</sub> (rat,4h) > 1951mg/L Acute dermal toxicity: LD <sub>50</sub> (rabbit) > 3160mg/kg
Skin Corrosion/ Irritation	Category 2
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Respiratory sensitizer	Not classified
Germ cell mutagenicity	Not classified

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Carcinogenicity	Proprietary Additive 2: NOEC>1000Pppm.
Reproductive toxicity	Proprietary Additive 1: Toxicity to reproduction: NOAEL(rat) = 497 mg/kg bw/day Developmental toxicity / teratogenicity: NOAEL(mouse) = 1340 mg/kg bw/day  Proprietary Additive 2: Toxicity to reproduction: NOAEL(rat,F1) >1000 ppm bw/day NOAEL(rat,F2) >1000 ppm bw/day Developmental toxicity / teratogenicity: NOAEL(mouse) = 1000 mg/kg bw/day(maternal) LOAEL(mouse) = 500 mg/kg bw/day(developmental) NOAEL(mouse) = 1000 mg/kg bw/day(teratogenicity)
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity(repeated exposure)	Category 2  Proprietary Additive 1: Oral: NOAEL(rat) = 497 mg/kg bw/day Dermal: NOAEL(rabbit) = 10000 mg/kg bw/day Inhalation: NOAEC<1.3mg/m <sup>3</sup> ; LOAEC=5.9 mg/m <sup>3</sup>  Proprietary Additive 2: Oral: NOAEL(rat) = 3000 ppm
Aspiration Hazard	Not available
<b>Chronic (Long-Term) Effects of Exposure</b>	
Route of Entry	Eye, skin, inhalation, ingestion
Effects of chronic exposure	N/D
Target Organs	N/D
Special Health Effects	N/D
<b>Other Information</b>	
Dust	May be irritating to the eyes and respiratory tract.



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Additives	Additives are encapsulated in the product and are not expected to be released under normal processing conditions of foreseeable emergency.
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## SECTION 12. ECOLOGICAL INFORMATION

<b>Toxicity</b>	Proprietary Additive 1: Fish (Danio rerio): LL0(96h) = 10000mg/L Invertebrates (Daphnia magna): EL50(24h): > 1000mg/L  Proprietary Additive 2: Fish (Danio rerio): LC50(96h) > 100mg/L Invertebrates (Daphnia magna): EC50 (24h): > 86mg/L Algae(Desmodesmus subspicatus): EC50 (72h)>100mg/L
<b>Persistence and Biodegradability</b>	N/D
<b>Bioaccumulative Potential</b>	N/D
<b>Mobility In Soil</b>	N/D

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Recommendations

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

Korea	Not applicable
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EU Classification	Not applicable
USA Management Information	Not applicable
Japan	Not applicable
China management information	Not applicable

## SECTION 16. OTHER INFORMATION

Created: 30 Aug 2022 Original

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

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