

SAFETY DATA SHEET

Product Name: NuPlastiQ® XP 24550 BioPolymer
Product No: NuPlastiQ® XP 24550
Revision Date: 16 May 2018



SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	NuPlastiQ® XP 24550 BioPolymer
Common Names	NuPlastiQ® XP 24550
Product Use	BioPolymer Resin for blowing film, extrusion, or other conversion processes
Manufacturer	BiologiQ Inc. <i>Headquarters</i> 2400 E 25 th St. Idaho Falls, ID 83404 <i>Manufacturing</i> 835 NE Main St. Blackfoot, ID 83221
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.
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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.

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Ingestion	No hazard in normal industrial use.		
Environmental Hazards	No significant hazard		
NFPA Hazard ID	Health: 0	Flammability: 1	Reactivity: 0
HMIS Hazard ID	Health: 1	Flammability: 1	Reactivity: 0

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS #	Concentration	GHS Hazard Codes
NuPlastiQ® GP BioPolymer		-	N/A
Adhesive Resin	9002-88-4	-	N/A
Polyethylene copolymer	25087-34-7	-	N/A

Contains: Additives and stabilizers

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 ₂ ; 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.

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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
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.
Environmental Precautions	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.

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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

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.

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Hygiene Measures	Use good personal hygiene practices: Wash hands before eating, drinking, smoking or using toilet facilities. Take off contaminated clothing and wash before reuse.
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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	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
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Melting Temperature	N/A
Molecular Weight	>10,000
Solubility in Water	Low

SECTION 10. STABILITY AND REACTIVITY

Reactivity	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
Hazardous Decomposition Products	This product does not undergo spontaneous decomposition. Hazardous decomposition products may include but are not limited to: Carbon dioxide (CO ₂), Carbon monoxide, Organic acids, Aldehydes, Alcohols, Acrolein, Formaldehyde, Acetaldehydes

SECTION 11. TOXICOLOGICAL INFORMATION

Product Toxicology

Oral Toxicity	Low order of toxicity
Dermal Toxicity	Non-hazardous
Inhalation Toxicity	Non-hazardous
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.
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.

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Regulatory Lists Searched	NTP, IARC, OSHA CARC
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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	N/D
Biodegradability	N/D
Incinerability	Incinerable

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

U.S. Regulations	
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.
EU EINECS 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.

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SECTION 16. OTHER INFORMATION

Created: 16 May 2018
Revisions: Original

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 NuPlastiQ® XP BioPolymers: NuPlastiQ® XP 24550 and NuPlastiQ XP 24551.

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.