



BioLogiQ creates plastics from polysaccharides found in plants. These plastics are designed to enhance both the functional and environmental performance of the packages and products produced with them.

All BioLogiQ compounded plastics start with **NuPlastiQ BioPolymer**, a 100% natural, renewably sourced, plant-based biopolymer.

### Description

- A member of the **BioBlend® XD Family** of Durable BioPolymers for blow molding.
- BioBlend® XD 22622 contains 20% NuPlastiQ compounded with HDPE.
- Made from 20% annually renewable agricultural resources.
- BioBlend® XD 22622 is supplied in pellet form.

### Applications

- BioBlend® XD 22622 is designed for blow molding applications that require stress crack resistance, rigidity, and high impact strength.

### Properties

PHYSICAL	TEST METHOD	NOMINAL VALUE	UNITS
Density:	Calculated	~1.04	g/cm <sup>3</sup>
<b>THERMAL</b>			
Melt Flow Index <sup>(1)</sup>	ASTM D1238	1.27	g/10 min (190°C/5 kg)
<b>ADDITIONAL INFORMATION</b>			
Moisture Content: <sup>(2)</sup>	ASTM D6980	≤ 0.5	%
<b>MECHANICAL PROPERTIES <sup>(3)</sup></b>			
<b>Tensile Properties</b>		ASTM D638	
Secant Modulus		475	MPa
Break Strength		27	MPa
<b>Flexural Properties</b>		ASTM D790	
Flexural Modulus		588	MPa
Ultimate Strength		28	MPa

**Note:**

- 1) MFI is based on a 20% NuPlastiQ masterbatch. Please contact us if you have any questions about MFI values for diluted blends.
- 2) Moisture content was measured with an infrared moisture analyzer at 110°C for 10 minutes.
- 3) These values are typical properties only and should not be used for specification purposes. End users should confirm results with their own tests. Mechanical properties were tested at a 20% NuPlastiQ concentration.

## Processing Considerations

- BioBlend XD 22622 can be run on existing processing equipment with a few adjustments.
- At temperatures above 200°C degradation of the NuPlastiQ BioPolymer may occur. A typical temperature profile in the 190-195C range is recommended.
- Under normal conditions, processing BioBlends may cause a slight odor and/or smoke. Always use proper ventilation. See the BioBlend® XD 22622 SDS for details.
- If extruder operation must be stopped temporarily, it is recommended to purge the material in the barrel before resuming processing or material degradation will occur.

## Packaging

- BioBlend XD 22622 can be shipped in the following formats:
  - 25kg moisture barrier bags.
  - 1000kg gaylord boxes with a moisture barrier bag

## Storage

- Material should be stored inside in a dry location away from heat and direct sunlight. Material must remain sealed in moisture barrier bag until ready to be used.

## Drying

- It is recommended to re-seal moisture barrier bags right after use. If pellets are exposed to a humid environment, they will absorb moisture from the air. If needed, dry pellets by introducing warm dry air at no more than 80°C for 1-4 hours.
- The estimated moisture content of a BioLogiQ BioBlend can be measured with an infrared moisture analyzer at 110°C for 10 minutes. The result of the measurement will not perfectly equal the moisture content, due to possible partial evaporation of plasticizer. The result from this test should be <0.5% moisture prior to processing.