

Product: **BioBlend® BC 27242**



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

- One of the BioBlend® BC Biodegradable/Compostable Resins designed for films and bags.
- Certified by TUV to be industrial and home compostable.
- BioBlend® BC 27242 is supplied in pellet form, fully compounded.

Applications

- BioBlend® BC 27242 is intended for films and bags.
- Used for products that require biodegradation and are intended for compost environments.

Properties

PHYSICAL	TEST METHOD	NOMINAL VALUE	UNITS
Density:	ASTM D792	1.3	g/cm ³
THERMAL			
Melt Flow Index	ASTM D1238	1.1	g/10 min (190 °C/2.16 kg)
ADDITIONAL INFORMATION			
Water Content: ⁽¹⁾	ASTM D6980	≤ 0.8	%
FILM PROPERTIES ⁽²⁾			
Tensile Strength			
MD	ASTM D882	28	MPa
TD	ASTM D882	23	MPa
Elongation at Break			
MD	ASTM D882	280	%
TD	ASTM D882	470	%
Elmendorf Tear			
MD	ASTM D1922	490	g
TD	ASTM D1922	321	g
Dart Drop Test			
	ASTM D1709	260	g

Notes:

- 1) Moisture content was measured with an infrared moisture analyzer at 110°C for 10 minutes.
- 2) The reported film properties are for a monolayer blown film from 100% BC 27242. The thickness was 1.0 mil, and the blow-up ratio was 2.5:1.
- 3) These values are typical properties only and should not be used for specification purposes. End users should confirm results with their own tests.

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Processing Considerations

- BC 27242 can be run on existing film blowing equipment.
 - Films made with NuPlastiQ are more sensitive to processing conditions such as temperature profile, residence time, die gap, and blow-up ratio. See the NuPlastiQ Film Processing Guide for additional information. typical recommended temperature profile will be in the 130°C – 165°C range.
 - Melt temperatures above 175°C may cause material degradation, lensing, and fish-eyes in the film.
- If extruder operation must be stopped temporarily, it is recommended to purge the material in the barrel before resuming film processing or material degradation will occur.

Packaging

- BC 27242 can be shipped in the following formats:
 - 25kg moisture barrier bags.
 - 1000kg gaylord boxes with a moisture barrier bag.

Storage

- Material should be stored in a dry location away from heat and direct sunlight. Material must remain sealed in moisture barrier bag. Material has a shelf life of 6 months if stored under normal warehouse conditions (typical max temperature of 80°F/26°C.)

Drying

- BioLogiQ BioBlends are dried after production and shipped in sealed moisture-proof bags that are ready to use as supplied. They should be stored indoors in the sealed container away from heat until used.
- 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 60°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 <0.8% moisture prior to processing.

Certifications

- BC 27242 has been certified to be industrial and home compostable by OK TUV.

