



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 GP, a 100% natural, renewably resourced plant-based biopolymer.

Description

- One of the NuPlastiQ® BC family of biodegradable BioPolymers designed for compostable films and bags.
- Supplied in pellet form.
- Fully compounded and ready for film production.

Applications

- NuPlastiQ® BC 27240 is intended for bags and film applications that require at least 40% bio-content.
- 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	3.7	g/10 min (190 °C/2.16 kg)
Melting Temperature Range:	ASTM D3418	140 – 160	° C
ADDITIONAL INFORMATION			
Water Content:	ASTM D6980	≤ 0.5	%
MECHANICAL PROPERTIES			
Tensile Properties			
Secant Modulus @ 1%	D638	195	MPa
Tensile Strength at Break	D638	12	MPa
Elongation at Break	D638	272	%
Flexural Properties			
Flexural Modulus	D790	237	MPa
FILM PROPERTIES			
Tensile Strength			
MD	ASTM D882	3400	psi
TD	ASTM D882	3000	psi
Elongation at Break			
MD	ASTM D882	290	%
TD	ASTM D882	530	%
Elmendorf Tear			
MD	ASTM D1922	400	g
TD	ASTM D1922	110	g
Dart Drop Test			
	ASTM D1709	360	g

Notes:

- 1) The reported film properties were tested on a monolayer blown film with 100% NuPlastiQ BC 27240 at a thickness of 1.0 mil and a blow-up ratio of 2.5:1.
- 2) Molded tensile properties were tested at 2 in/min. Flexural properties were tested at 0.25 in/min with a 2" span and 5% deflection.
- 3) These values are typical properties only and should not be used for specification purposes. End users should confirm results with their own tests.

Processing Considerations

- BC 27240 can be run on existing processing equipment. Generally used for monolayer films.
- Films made with NuPlastiQ are slightly more sensitive to processing conditions such as temperature profile, die gap, and blow up ratio. See the NuPlastiQ Film Processing Guide for additional information.
- Under normal conditions processing NuPlastiQ may cause a slight odor and/or smoke. Always use proper ventilation. See the NuPlastiQ® BC 27240 SDS for details.

Storage and Drying

- Pellets are shipped in moisture-proof metallic bags and are ready to use as supplied. They should be stored in a sealed container with desiccant in a dry location away from heat.
- 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 60°C for 1-4 hours. Pellets should be <0.5% moisture content prior to processing.