



DESCRIPTION

NuPlastiQ CG 1000 Certified Grade BioPolymers are plant-based polysaccharide, low crystallinity, thermoplastic resins that offer exceptional functional and environmental benefits. They can be used alone, but they are designed to be blended with biobased and biodegradable resins such as PLA, PHA, and PBAT. **Using NuPlastiQ CG 1000** resins helps reduce both fossil fuel-based plastic content and greenhouse gas generation.

Applications

- Designed to be compounded with other bio-based and biodegradable resins to form:
 - **BioBlend® BC** Biodegradable/Compostable blends for packaging and films.
- CG 1000 can also be compounded with traditional fossil-based resins to produce:
 - **BioBlend® XP** High Performance BioPolymers for packaging.
 - **BioBlend® XD** High Durability Polymers for durable goods.
- The strength of CG 1000 can allow for downgauging, especially for thin film applications.
- Supplied in pellet form.

Properties

PHYSICAL	TEST METHOD	NOMINAL VALUE
Density:	ASTM D792	1.40 g/cm ³
THERMAL		
Melt Flow Index (170 °C/21.6kg):	ASTM D1238	6 g/10 min
MECHANICAL		
Tensile Strength at Yield:	ASTM D638	>30 MPa
Tensile Strength at Break:	ASTM D638	>30 MPa
Young's Modulus:	ASTM D638	1.5 GPa
Elongation at Break:	ASTM D638	<10%
Dart Impact Resistance:	ASTM D5628	3.5 kg
ADDITIONAL INFO.		
Moisture Content: ⁽¹⁾	ASTM D6980	≤ 1.0 %

Table Notes:

- 1) Moisture content was measured with an infrared moisture analyzer at 105°C for 10 minutes.
- 2) These values are typical properties only and should not be used for specification purposes. End users should confirm results with their own tests.

Packaging

- NuPlastiQ® CG 1000 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 has a shelf life of 1 year if stored under normal warehouse conditions (typical max temperature of 80°F/26°C.)

Drying

- NuPlastiQ CG 1000 will absorb moisture from the environment. It is delivered in moisture barrier sealed bags and drying is not normally required prior to use. The material must be kept sealed until directly before processing. Any leftover material should be re-sealed as soon as possible to prevent moisture absorption. If left in an open container, pellets should be dried to less than 1% moisture as measured by the test conditions in the table above. Drying of pellets can be performed by introducing warm, dry air at 60°C for 1-4 hours.

Certifications

- CG 1000 maintains the compostability of the resin with which it is compounded.
- CG 1000 has passed ASTM D6400 and EN-13432 and is certified to be industrial and home compostable by OK TUV.
- CG 1000 is certified to be marine biodegradable by OK TUV.
- CG 1000 is a USDA Certified Biobased Product.

