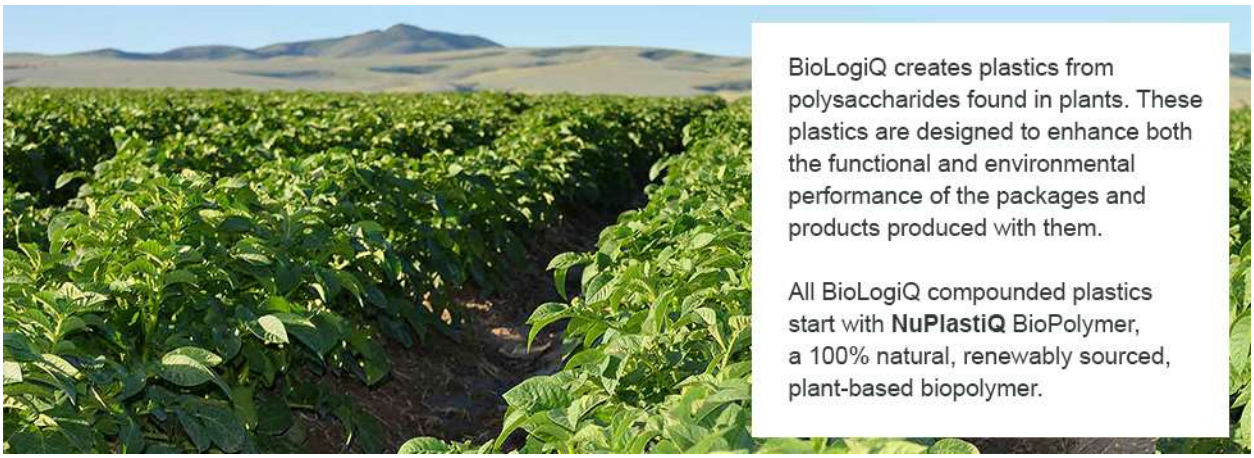
Technical Data Sheet (TDS)

Product: BioBlend® XD 25050



Description

- One of the BioBlend® XD family of high durability BioPolymers designed for injection molding.
- BioBlend XD 25050 is a masterbatch that contains 50% NuPlastiQ GP BioPolymer compounded with polypropylene.
- This Masterbatch is normally downblended with 20% to 60% additional polypropylene to achieve 20% to 40% biobased content in the final product.
- Made from 50% annually renewable agricultural resources.
- BioBlend® XD 25050 is supplied in pellet form.

Applications

- BioBlend® XD 25050 is intended for injection molded applications that require fast cycle times.
- Recommended for large thin wall parts, caps, and closures.

Properties

PHYSICAL	TEST METHOD	NOMINAL VALUE	UNITS
Density:	ASTM D792	1.16	g/cm^3
THERMAL			
Melt Flow Index	ASTM D1238	5.4	g/10 min (190 °C/2.16 kg)
Melting Temperature Range:	ASTM D3418	130	° C
Heat Deflection Temperature Range:	ASTM D3418	81-100	° C
MECHANICAL			
Young's Modulus:	ASTM D638	923	MPa
Tensile Strength at Yield:	ASTM D638	12.2	MPa
Tensile Strength at Break:	ASTM D638	30.8	MPa
Flexural Modulus:	ASTM D790	1450	MPa
Ultimate Flexural Strength:	ASTM D790	47.1	MPa
Izod Notched Impact Strength:	ASTM D256	25.6	J/m
ADDITIONAL INFORMATION			
Water Content:	ASTM D6980	≤ 0.5	%

Note: 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

- XD 25050 can be run on existing processing equipment and is generally diluted with a customer specific polypropylene to achieve a final NuPlastiQ GP concentration between 10% and 40%.
- Injection molded applications with XD 25050 are slightly more sensitive to processing conditions such as temperature profile.

- Under normal conditions, processing BioBlends may cause a slight odor and/or smoke. Always use proper ventilation. See the **BioBlend® XD** 25050 SDS for details.

Storage and Drying

- Pellets are shipped in sealed moisture-proof bags and are ready to be used as supplied. Until used, they should be stored in a sealed container away from heat.
- If pellets are exposed to a humid environment, they will absorb moisture. 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.