



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® XP family of high performance biopolymers designed for blown film applications.
- NuPlastiQ® XP 24550 is a masterbatch that contains 50% NuPlastiQ® GP BioPolymer compounded with butene LLDPE.
- Made from 50% annually renewable agricultural resources.
- Supplied in pellet form.

## Applications

- Used for final products requiring strength and plasticity, such as packaging.

## Processing Considerations

- XP 24550 is designed to be diluted with polyethylene to achieve a final NuPlastiQ® GP BioPolymer content between 14% and 40%.
- XP 24550 is designed to be run on existing equipment.
- Films made with NuPlastiQ are slightly more sensitive to processing conditions such as temperature profile, die gap, and blow up ratio. See the NuPlastiQ LLDPE 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® XP 24550 SDS for details.

## Properties

PHYSICAL	TEST METHOD	NOMINAL VALUE
Density:	ASTM D792	1.16 g/cm <sup>3</sup>
<b>THERMAL</b>		
Melt Flow Index (190 °C/2.16kg):	ASTM D1238	0.38 g/10 min
Melting Temperature Range:	ASTM D3418	130 °C
Heat Deflection Temperature:	ASTM D3418	81 – 100 °C
<b>ADDITIONAL INFORMATION</b>		
Water Content:	ASTM D6980	≤ 0.5 %

- This TDS covers the following NuPlastiQ® XP BioPolymers: XP 24550 and XP 24551

## 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.