



Plastic is good. We make it better.

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Who is BioLogiQ?

- Idaho Falls, Idaho based company, founded in 2011.
- Established to create a useful plastic from the excess starch produced during potato processing.
- Our goal is to provide plant-based biopolymers that enable material & energy reductions while considering recyclability, and/or biodegradability, helping to build a world free of pollution caused by plastics.



Our product: **NuPlastiQ**

- **NuPlastiQ** is an amorphous polymer made from 100% USDA Certified Biobased Content.
- Made from plant-based **carbohydrates**, along with small amounts of **naturally sourced glycerin**.



How is NuPlastiQ used?

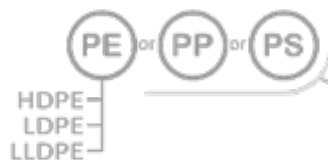
- We compound **NuPlastiQ** with other traditional plastic or bioplastic resins in a second proprietary process (Eco-Alloysm Reactive Extrusion).
- The result is a new family of **BioBlend**® Resins with enhanced functional and environmental performance.
- **Selling products: 25kg bags (55lb) or 1,700 lb gaylord**
 - **BioBlend XP or XD:**
50% [NuPlastiQ] + 50% [PP or PE or PS]: Renewable content and carbon footprint
Customer performs final dilution (dry-blend at extrusion) for desired renewable content
 - **BioBlend BC: Fully formulated**
[NuPlastiQ] + [PBAT and/or PLA]: Certified compostable films

Sustainability Benefits of BioBlend resins made from NuPlastiQ

	XP	XD	BC
Primary Applications	Flexibles: Packaging, etc.	Rigids: Packaging, durables, etc.	Flexibles: Packaging, bags, mulch films, etc.
Plant-Based	Yes (5-40%)	Yes (5-40%)	Yes (30-50%)
Reduced Greenhouse Gas Emissions	Yes, compared to fossil-based resins		Yes, compared to evaluated compostable resins
Material Reduction via High Strength	Possible	No	Possible
Primary Compounding Resins	PE	PE, PP, PS	PBAT, PBAT+PHA
End of Life Objective	Recycling, landfill or incineration		Composting or anaerobic digestion

Quick Reference Guide

Based on current information. Subject to change at any time.



Polyolefin-Based BioBlend Resins

BioBlend XP
Packaging & Single Use Products

BioBlend XD
Durable Goods & Rigid Containers

Cost Effective, High Performance, Renewable Content

Designed for Applications Requiring:

- High performance, renewable content
- Carbon footprint/fossil fuel reduction



Blown and Cast Film Extrusion
FFS films, lamination films, stand up pouches, shrink, stretch, trash liners, shopping bags, etc.



Blow and Injection Molding
Personal care bottles, home care, caps & closures, reusable cups, disposable cutlery, etc.



Thin-Wall Thermoforming
Yogurt cups, margarine cups, etc.

\$ cost effective solution for 5 to 40% renewable content
(in many cases only practical route)

RECYCLABLE with special consideration

potential for LIGHT WEIGHTING
extruded films and sheets

DROP-IN manufacturing

REDUCED
carbon footprint versus fossil-based

base resin skin BioBlend XP or XD
encapsulate for odor control and better optics

Note on BioBlend XP/XD Resin Biodegradability

Some BioBlend XP/XD Resins have been observed to biodegrade using ASTM D5338 and D5511 test methods. BioLogiQ is investing significant resources to understand underlying mechanisms and how lab test results correlate to real world environments. However, BioBlend XP/XD resins will not meet current certifications requirements (e.g. ASTM D6400) and therefore are not to be considered to be biodegradable for consumer environmental claim purposes.

BioBlend[®] Resins



Biodegradable BioBlend Resins

BioBlend BC
Biodegradable & Compostable

Cost Advantaged, Compostable/Marine Biodegradable

Designed for Applications Requiring:

- Industrial or thin wall, home compostable items
- Future marine biodegradability requirements



Blown and Cast Film Extrusion
Agricultural mulch films, shopping bags, trash can liners, etc.

Plastic to... CO₂ and H₂O Biodegradation without need to prior Fragmentation

\$ cost effective solution for ASTM D6400 compliant Biodegradability [Industrial Compost]



Please check local requirements and label accordingly



Thank you!
Questions?