



ENGINEERED BIOPLASTIC COMPOUNDS

- ▶ Derived from rapidly renewable resources for eco-conscious applications
- ▶ Multiple resin systems: polyamide, polyester, & PLA
- ▶ Engineered compounds expand material's performance envelope

ADDITIONAL BENEFITS

Bioplastics

- Fulfill demand for "green" products
- Lower carbon footprint than petroleum-derived plastics
- Fully colorable

PLA

- Hybrids provide improved toughness, heat resistance, and moldability
- High ecological sustainability at competitive prices
- Ideal for semi-durable consumer goods

PA & PTT

- Extensive history in successful applications
- Excellent physical properties when reinforced
- Good chemical and thermal resistance
- Lower moisture absorption than traditional nylons

Imagine thermoplastic compounds that will help you meet green initiative requirements while providing the value-added performance that engineered applications require. At RTP Company, we not only imagined them, we've made them a reality.

Bio-resins are combined with property enhancing modifiers by RTP Company during compounding to produce products providing structural reinforcement, lubricated wear resistance, PermaStat® permanently antistatic, and halogen-free flame retardant features for a wide variety of end-use applications.

Bioplastic compounds from RTP Company can help processors and OEMs meet their goals and consumer demands for products that offer environmental advantages.

Since bioplastics are not derived from limited fossil-fuel resources, they have a lower carbon footprint and less environmental impact. Production of bioplastics typically produces lower CO₂ gas emissions and requires less energy than traditional plastics.



Available bio-resins include polylactic acid (PLA), polyamide, and polyester, which are derived from rapidly renewable resources and provide ecological sustainability to meet "green" product or marketing objectives.

Bio-based polyamides and polyester resins have been used for years in a multitude of engineered applications. Compounds manufactured from them have proven performance and make application development a very predictable process.

These products are ideal for end-use applications like semi-durable consumer goods, housing and enclosures for electronics and business equipment, industrial components, electrical connectors, and automotive interiors.

Engineered bioplastic compounds...another innovation from RTP Company your global compounder of custom engineered thermoplastics.



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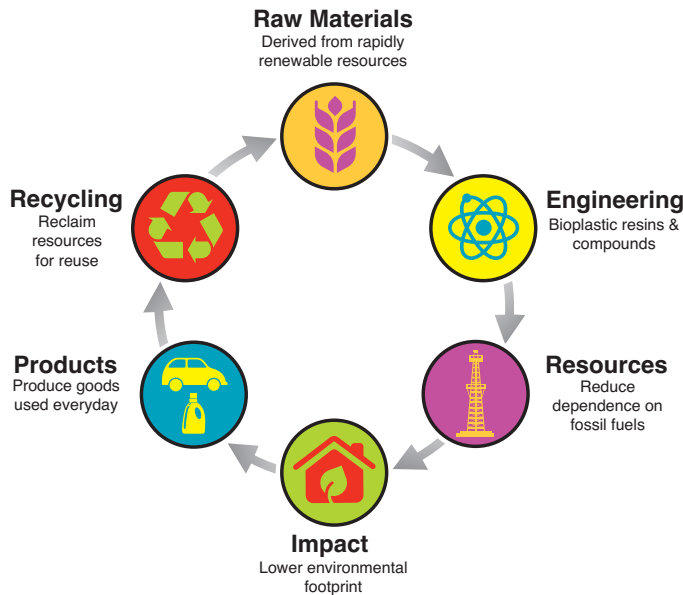
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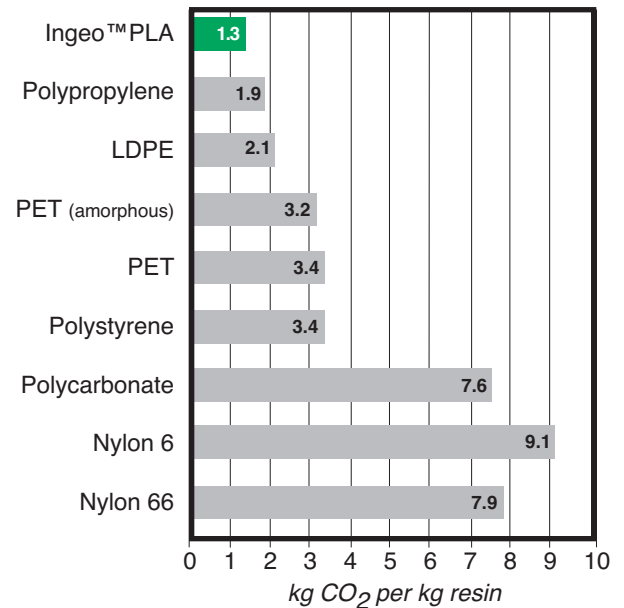
Lifecycle of Sustainability

Bioplastics provide increased ecological benefits



Lower Environmental Footprint

CO₂ gas emission to produce variety of resins



Source: PlasticsEurope and NatureWorks

Initial Bioplastic Compounds from RTP Company

Contact us to have a custom material formulated to your specifications

PRODUCT	ENHANCEMENT	DESCRIPTION	RENEWABLE RESOURCE CONTENT (WT%)
RTP 2099 X 121825 E	Conductive	Polyamide – PermaStat® Permanently Antistatic	31%
RTP 2099 X 121241 B	Conductive	PLA/PC Hybrid – PermaStat® Permanently Antistatic	25%
RTP 4799 X 121826 C	Conductive	Polyester – PermaStat® Permanently Antistatic	29%
RTP 2099 X 115387 B	Flame Retardant	Polyamide – 30% Glass Fiber – Halogen-Free FR	31%
RTP 2099 X 131060	Flame Retardant	PLA Hybrid – Halogen-Free FR	20%
RTP 4799 X 115376 E	Flame Retardant	Polyester – 30% Glass Fiber – Halogen-Free FR	19%
RTP 2099 X 115387 A	Structural	Polyamide – 30% Glass Fiber	43%
RTP 2099 X 126218 A	Structural	PLA – Impact Modified	93%
RTP 2099 X 126213	Structural	PLA/PC Hybrid	30%
RTP 2099 X 121249 C	Structural	PLA – 30% Glass Fiber	67%
RTP 2099 X 115375 C	Structural	PLA/PMMA Hybrid – Transparent	38%
RTP 2099 X 115375 B	Structural	PLA/PMMA Hybrid – Impact Modified – Opaque	38%
RTP 4799 X 115376 C	Structural	Polyester – 30% Glass Fiber	26%
RTP 2099 X 115387 C	Wear Resistant	Polyamide – 30% Glass Fiber – 15% PTFE	34%
RTP 4799 X 115376 F	Wear Resistant	Polyester – 30% Glass Fiber – 15% PTFE	20%

RTP Company: Your Global Compounder Of Custom Engineered Thermoplastics

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