MITSUBISHI CHEMICAL

DURABIO™ | BioPBS™

Bio-Based Engineering Plastics for 3D Printing

KAITEKI Value for Tomorrow

DURABIO™
Bio-based engineering plastic

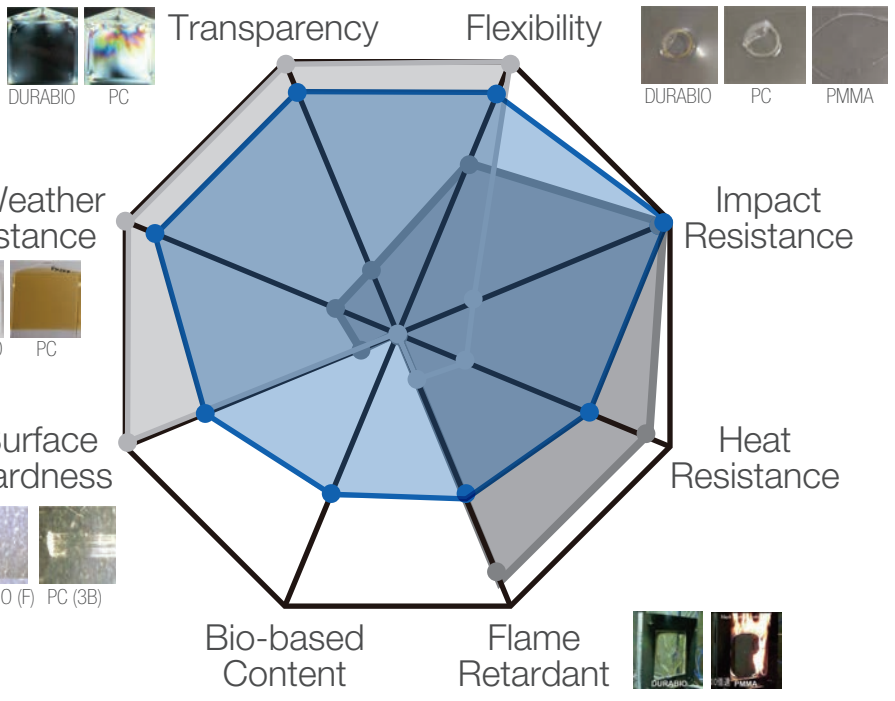
Mitsubishi Chemical's DURABIO™ HI 3D filament for FFF/FDM printing is a bio-based material that is a truly durable engineering plastic that is made from isosorbide (derived from sorbitol), a widely available feed-stock. In addition to being environmentally friendly, DURABIO™ material also combines the advantageous properties of Polycarbonate (PC) and those of the Polymethyl methacrylate (PMMA), creating an innovative renewable material with extraordinary properties.

DURABIO™ is particularly designed for scratch and impact resistance applications requiring exceptional durable transparency and visual appearance, such as:

- Touch screen displays
- Optical features: high transparency, low birefringence
- Interior automotive console and IP trim: paintless decorative parts
- Exterior automotive grills, pillar panels and trim: paintless decorative parts
- Sporting equipment: crystal clear lenses
- Aerospace: light pipes inside the cabin

Product Features

- Partially bio-based - Made from renewable materials
- BPA free
- Chemical inertness
- Ductility, with high surface impact strength
- UV/Weather resistant - Ensures long life of products, saving resources
- High heat resistance
- Abrasion resistant - Ensures intact aesthetics over many years of usage
- Excellent optical and mechanical properties



BioPBS™
Truly Environmentally-friendly Plastic for Green Products

Mitsubishi Chemical and PTT have partnered together to develop and patent an innovative bioplastic - BioPBS™. Derived from renewable material and known for superior ambient compostability, BioPBS™ is a truly environmentally-friendly plastic for green products.

BioPBS™ (partially bio-based polybutylene succinate) is revolutionary in its two-fold bio properties.
- Partially bio-based and a biodegradable plastic.
- Compostable - Derived from natural resources, BioPBS™ is compostable into biomass, carbon dioxide and water. BioPBS™ has no adverse effects on the environment and is naturally compostable, without requiring a specialized composting facility.

Product Features

- Bio-based - BP (Biomass Pla) 299/300, ASTM D6866, DIN Certco 8C084 / 8C085 / 8C083
- Compostable - BPI (certif. 10528580)
- High service temperature - Products can withstand up to 100°C.
- Food contact approved - FCS /FCN No.1817/1818
- High performance heat sealability - Same level of seal strength as conventional petro-plastic but achieved with lower temperature
- Compatible with natural fibers and other biodegradable plastics such as PLA
- Excellent Processability

Certifications & Compliance