

DuPont™ Hytrel® ECO B Thermoplastic Elastomer Sets New Standard for Functional Sustainability



Based on a biomass balance approach, these newest Hytrel® grades can improve sustainability for many applications, including sporting and consumer goods, furniture, footwear, and automotive components.

A Balanced Approach

DuPont produces Hytrel® ECO B using a biomass balance approach certified by the ISCC+ (International Sustainability & Carbon Certification) standard. This approach is increasingly adopted by the plastic value chain because it is cost-efficient and still benefits the environment. Hytrel® ECO B uses up to 72% second-generation biomass (bio residue/waste) that does not compete with food/feed supplies and does not induce land use change. The biomass balance approach also increases the flexibility to manage through the value chain with the same or higher benefit to the environment, enabling the shift to a more circular economy.

Equal Performance

Hytrel® ECO B properties are identical to Hytrel® standard grades. No transition evaluation or retooling is needed after Hytrel® standard grades have been specified. Manufacturers who seek to reduce the environmental impact of their offerings, yet still require high-performance materials for their products, will find a superb balance in Hytrel® ECO B. This new, sustainable solution meets the needs of manufacturers in the consumer, sporting goods, consumer electronics, and furniture industries. It is also a sustainable option for the automotive industry, which already relies on conventional grades of Hytrel®.

Hytrel®, as a TPC-ET thermoplastic elastomer, goes further than other TPEs in its ability to match the flexibility of rubber, while still maintaining the strength and ease of processing of plastics. Other types of TPEs are also soft and flexible, but rarely are they as durable and robust as Hytrel®. With Hytrel® ECO B, this unique mix of characteristics is now available in a range of significantly more sustainable grades.

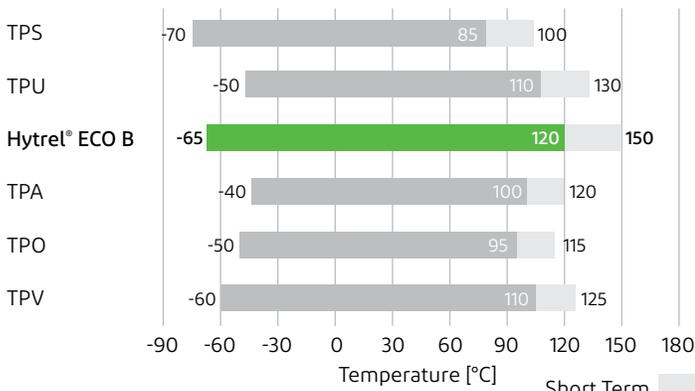


100%

All Hytrel® ECO B materials are produced in a plant powered by electricity from 100% renewable sources

Backed by renewable energy credits

Service Temperature Range Comparison for Thermoplastic Elastomers



Source: DuPont

Like all Hytrel[®] grades, this new range of sustainable material solutions offers the same durability and strength, coupled with incredible flexibility. The chart above shows that these materials have a wide range of service temperatures. In addition, they remain flexible even in extreme cold, and maintain properties even in extreme heat. Chemically resistant, they can be overmolded onto many rigid thermoplastics. Finally, exceptional melt stability enables processors to recycle scrap efficiently.

| Hytrel [®] Standard Grade | Hytrel [®] ECO B |
|------------------------------------------------------------------|-------------------------------|
| Hytrel [®] 3078 | Hytrel [®] ECO 3078B |
| Hytrel [®] 4056 | Hytrel [®] ECO 4056B |
| Hytrel [®] 4039 (High Flow Hytrel [®] 4069) | Hytrel [®] ECO 4039B |
| Hytrel [®] 4069 | Hytrel [®] ECO 4069B |
| Hytrel [®] 5556 | Hytrel [®] ECO 5556B |
| Hytrel [®] 6356 | Hytrel [®] ECO 6356B |

Hytrel[®] ECO B properties are identical to Hytrel[®] standard grades. These six grades range in hardness from 30 to 63 Shore D. Source: DuPont

Why Choose Hytrel[®] ECO B?

In addition to this material's improved sustainability profile, its fundamental properties are identical to those of Hytrel[®] produced through fossil feedstocks, and include:

- Flexibility and resilience
- Excellent low temp flexibility and toughness
- Broad service temperature (-65°C to 150°C)
- Superior bonding performance with PC based material
- Highly resistant to hydrocarbons & other fluids
- Excellent flex fatigue resistance
- Excellent creep resistance
- Resistant to tearing and flex cut growth
- Good noise and vibration dampening at low temperatures
- Wide processing window with thermal stability

Transforming industries and improving lives through materials science.

The foundation of everything we do centers around what our customers need. It's not just about the solutions we innovate, but also how we work with our customers. Through our worldwide network of innovation and technical centers, our leading researchers work in close collaboration with customers, from concept to commercialization, using a wide range of processing techniques, prototyping technologies, and testing expertise.

Discover more

For more information about using Hytrel[®] ECO B solutions in your applications and improving your product's sustainable footprint, contact your DuPont representative.

[dupont.com](https://www.dupont.com)



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