Bikers Enjoy the Ride Longer with Delrin® E-bike Gears



Reliable gears made to last

Delrin acetal homopolymer resin—one of the most crystalline engineering thermoplastics available—gives you the ability to design lightweight yet durable high-quality e-bike parts that deliver on performance promises.





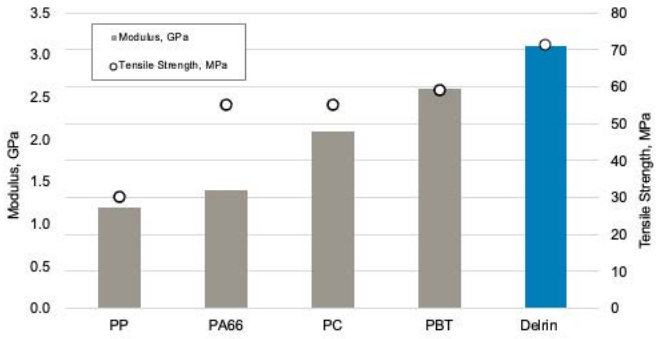
Delrin is the leading choice of engineering polymer for demanding gear applications

E-bike designers choose Delrin because it:

- Works when other plastics would fail
- Offers more design flexibility and freedom
- Has proven high quality performance
- Lowers part cost

In addition to making durable parts at higher production rates, with Delrin you can count on consistent performance and supply stability.

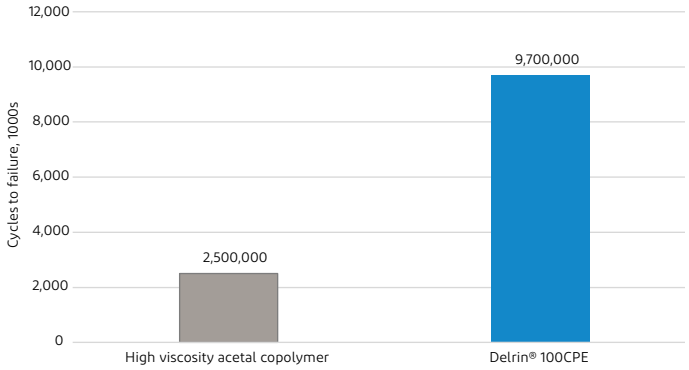
Plus, our technical knowledge and processing support can help you design dimensionally accurate, rounder gears of the highest quality.



Source: DuPont

Delrin is ideal for high-performance e-bike gears because of its:

- High strength and stiffness without fillers
- Low wear and friction for less maintenance
- Low noise for smooth operation
- Long life fatigue performance



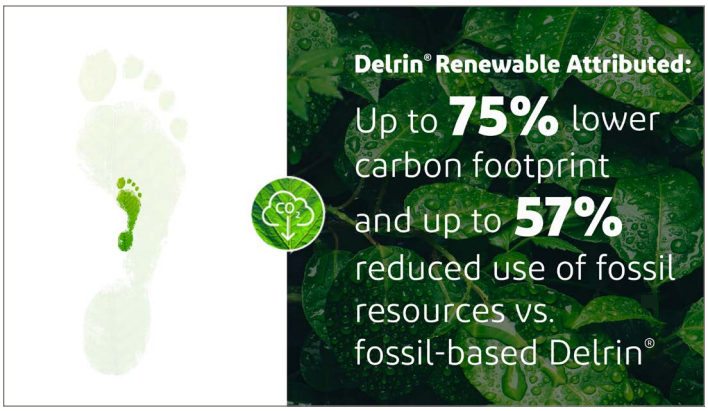
Test standard: ASTM D671 80°C, 220 kg/cm^2, 30Hz
Source: DuPont

Delrin® 100CPE, a high viscosity acetal homopolymer, can significantly extend gear service life compared with alternative materials. A Renewable Attributed version of this grade is now also available: Delrin® RA100CPE NCO10.

Delrin® RA100CPE e-bike gears help reduce greenhouse gas emissions

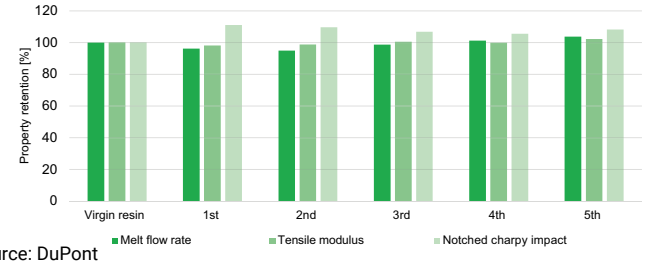


Delrin is helping consumers achieve smarter, healthier and better living. Manufactured in a facility that is powered by renewable electricity, and with its base polymer produced using 100% bio-feedstock from waste in accordance with ISCC mass balance certification, gears made with Delrin® Renewable Attributed help e-bike manufacturers meet their sustainability goals.



Delrin® Renewable Attributed not only has a significantly lower carbon footprint and lower abiotic depletion potential but also offers the potential (if and where infrastructure exists) to be up to 100% recycled, making it a good candidate for closed loop business models.

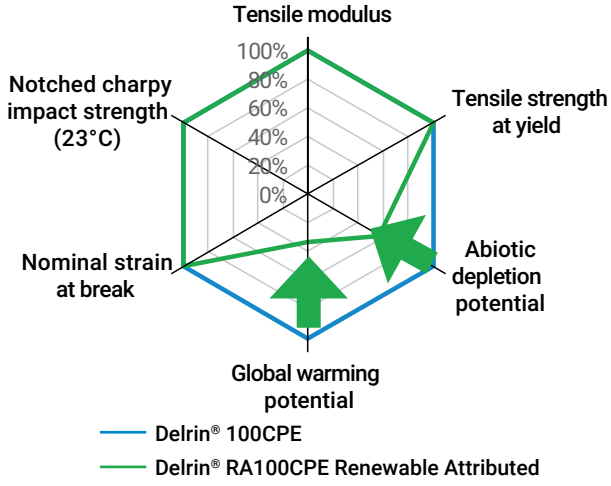
100% Mechanical properties retention after five passes of 100% regrind.



Source: DuPont

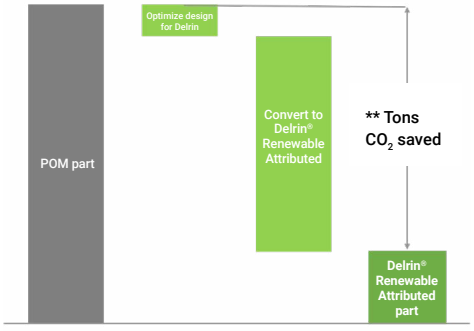
Sustainably sourced

Delrin® RA100CPE, a high viscosity, low emission acetal homopolymer grade produced from certified sustainable sources.



Source: DuPont

Planning on Delrin® Renewable Attributed from the early phases of a project can result in significant CO_2 savings throughout the lifetime of the application—with tangible benefits to end-customers and the environment.*



Source: DuPont

* Data on POM from Plastics Europe. Data for Delrin and Delrin® Renewable Attributed from three panel peer reviewed LCA. Assumed redesign weight savings is 10%.

** Exact figures can be shared under NDA.

To learn more, contact your Delrin representative or visit Delrin.com.

Delrin®

Delrin® is an industry-leading premium industrial polymer business. Grounded in strong innovation, Delrin is a category creator with a longstanding reputation for quality, reliability, supply and product performance. The iconic Delrin brand, coupled with proprietary technology and deep application expertise make us a leader in the high-end engineering polymer market. Delrin has exciting growth prospects from exposure to automation, actuation, healthcare, mobility and consumer applications.

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Form No. HMC1123