

# IMAGIN3D™ Polyethylene OBC

A sustainable 3D printing filament that brings your 3D designs to life

One driving force behind the 3D printing industry today is the pursuit of reduced environmental impact, and IMAGIN3D™ Polyethylene Olefin Block Copolymer (OBC) prioritizes sustainability throughout its lifecycle.

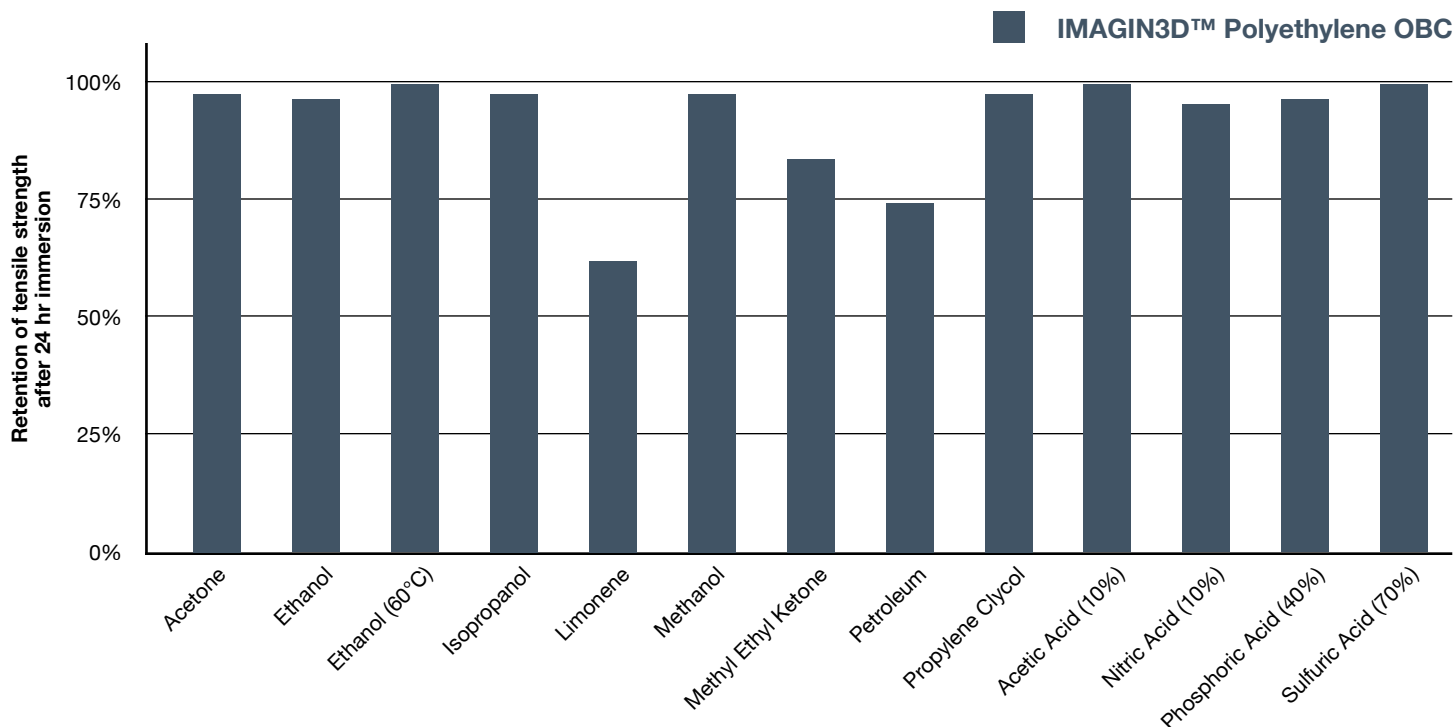
IMAGIN3D™ Polyethylene OBC filament is a high-performance build material that enables the production of lightweight and durable 3D printed parts, with excellent remoldability for an extended lifespan.

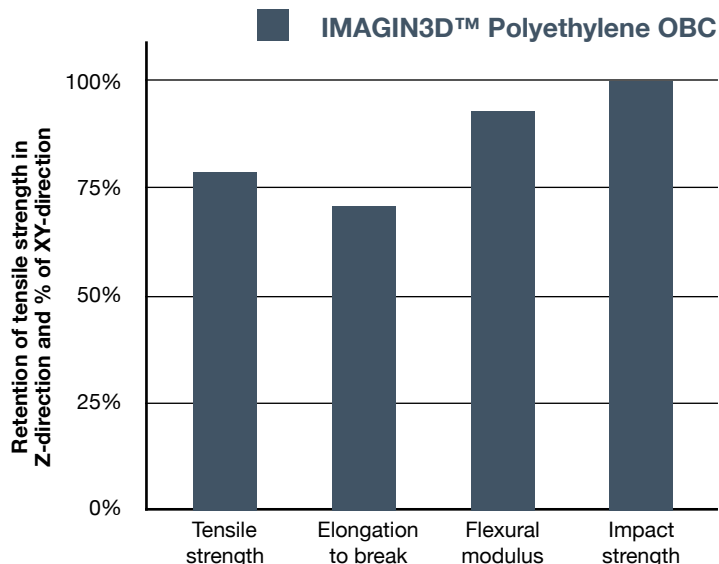
As the first polyethylene-based build material for 3D printing, this breakthrough high performance filament brings polyolefin properties to 3D printing, without the issues commonly associated with printing polypropylene. Its semicrystalline structure enables excellent z-axis properties in printed parts and its outstanding chemical resistance enables new 3D printing applications.

IMAGIN3D™ Polyethylene OBC filament is one offering in Dow's IMAGIN3D™ platform of 3D printing solutions. From support materials to build materials, Dow is addressing gaps in the current additive manufacturing materials landscape to enable greater design freedom, reduce product development cycles, and offer distinct performance benefits.

## Key benefits:

- Excellent printability
- Faster start-up
- Less fine tuning of printing parameters
- Improved part dimensional stability
- Excellent z-axis property retention
- Lighter weight parts with higher durability
- Chemical resistance enables new applications





IMAGIN3D™ Polyethylene OBC also offers an extremely low flexural modulus. This property gives IMAGIN3D™ Polyethylene OBC flexibility that other filaments just can't offer. Enable new printing applications such as living hinges, or combine with other properties such as its excellent chemical resistance to expand opportunities in automotive 3D printing.

With its semicrystalline structure, IMAGIN3D™ Polyethylene OBC has highly improved z-axis properties over other common filaments. IMAGIN3D™ Polyethylene OBC can regularly withhold >70% of its mechanical properties.

## About Dow

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### Global Dow Center

2211 H.H. Dow Way  
Midland, MI 48674

### US

Toll Free 800 441 4DOW  
989 832 1542

[dow.com/IMAGIN3D](http://dow.com/IMAGIN3D)

### International

Europe / Middle East + 800 36 94 63 67  
Italy + 800 783 825  
Asia / Pacific + 800 77 76 77 76  
+ 60 37 958 3392  
South Africa + 800 99 5078

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