

# Maximized Performance in Automotive Soft Interior Applications



## Enhanced Solutions with *Catalloy*

- | Soft tactile feel
- | High flexibility
- | Low gloss surface appearance
- | Low volatiles emission
- | Excellent colorability
- | Recyclability
- | Durability and toughness
- | Excellent impact properties
- | Dimensional stability
- | Grain retention
- | Low density
- | Good processability

The automotive industry continues to move toward softer polyolefin materials for interior components that provide the quality, enhanced luxury and feel valued by consumers.

The rigorous OEM performance requirements and specifications for automotive interior components continue to increase, demanding good dimensional stability, excellent impact behavior, heat and scratch resistance, along with good processability and lighter materials. LyondellBasell has long been an innovative pioneer in the creation of soft polyolefin-based materials for instrument panels, door panels, consoles and other automotive interior components.



**For more information on the *Catalloy* family of products, including *Adsyl*, *Adflex*, *Hiflex*, *Softell* and *Hifax* please contact [Catalloy@lyb.com](mailto:Catalloy@lyb.com) or visit [lyb.com](http://lyb.com)**

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*Catalloy* resins are excellent starting materials to design and build customized thermoplastic vulcanizates (TPV) compounds tailored to customer specifications.

*Catalloy* resins are alloys of uniformly dispersed synthetic rubber and polypropylene produced in-reactor during polymerization. This proprietary technology enables greater influence on the key properties of the polymer. *Catalloy* grades with similar flexural modulus and melt flow rates can exhibit very different advantages due to the type and amount of synthetic rubber combinations. More detailed discussions with your LyondellBasell sales and technical team can help to determine how *Catalloy* resins can be used to enhance your current and new product performance.

## Similar density to PP (0.89 g/cm<sup>3</sup>)

- Low density allows for light-weighting and a yield advantage

## Flexural modulus (20 – 1,200 Mpa)

- Wide range of stiffness with enhanced impact performance
- Super soft low modulus grades
- Plasticizer-free

## Compatible with both PE and PP

- Utilized for blends, over molding and co-extrusion applications

## High and low temperature performance

- Broad working temperature for a wide range of applications
- Melting points from 140°C (Random PP matrix) to 160 °C (Homopolymer PP matrix)
- Specific grades with ductile impact performance down to -40°C

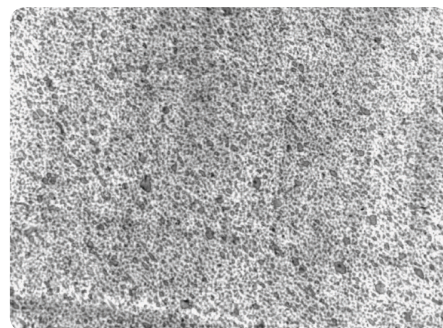
## Gloss control and soft touch grades

- Luxurious appearance and feel for consumer applications
- Lower gloss matte finish
- Improved grain retention

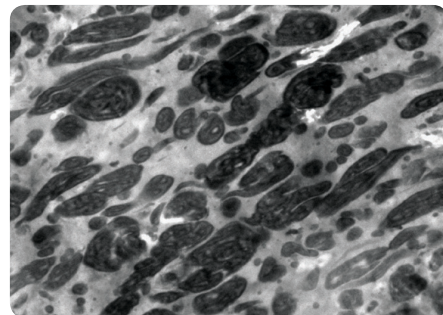
## Processing and handling comparable to conventional PP

- Engineered to process on conventional extrusion, calendaring and molding equipment
- Melt Flow Rates from 0.6 – 30 for extrusion and injection molding applications
- Available in pellet form delivered in bags, cartons and railcars

## Uniform Dispersion of Amorphous Phase



*Catalloy* Reactor TPO



Mechanical PP/Rubber Blend