

## **Blending the Unblendable:**

## Bridging the Gaps Between Polyethylene & Polypropylene

# Previously Unattainable Polymer Performance Options are a Reality with INTUNE™ Polypropylene-based OBCs

For 50 years, processors have had to choose between the attributes of polypropylene and polyethylene due to lack of polymer compatibility. INTUNE™ Polypropylene-based Olefin Block Copolymers (OBCs) offer a new range of innovative solutions that combine the best of both worlds.

### The Power of And

With INTUNE™ Polypropylene-based OBCs, polypropylene (PP) and polyethylene (PE) can now be combined to create innovative, highly differentiated polymer blends and multi-layer structures that are compatible with existing processing technology. It helps fine-tune properties to create robust enduse products that exhibit a wide range of benefits. Table 1 exhibits just a few of the many exciting possibilities.



INTUNE™ PP-based OBC technology also allows the development of polymer designs based on the polymer system and desired performance. Using various levels of INTUNE™ PP-based OBCs, PP can also be combined with polyolefin elastomers and polar materials such as ethylene vinyl alcohol (EVOH) and polyamide to create broad, flexible formulations that meet specific needs in blends and tie layers.

#### **Discover the Possibilities**

For more information on INTUNE™ PP-based OBCs technology and how it brings polar and non-polar polymers together to reshape the plastics industry, contact your Dow Elastomers representative, or contact the nearest location listed on the back.

**Table 1:** INTUNE™ PP-based OBCs: Multiple properties, applications, and benefits

Processing Technology	Enhanced Properties	Benefits	Application Examples
Blow Molding	Toughness + Stiffness + Heat Distortion Temperature	Lightweighting AND Improved Temperature Resistance	Rigid Containers     Drums
Injection Molding	Stiffness + Toughness + Clarity	Affordable Clarity AND Toughness	Household Containers
Rotomolding	Stiffness + Toughness + ESCR	Lightweighted Toughness AND Chemical Resistance	Industrial Tanks     Kayaks
Extrusion/ Multi-layer Structures	Adhesion + High Temp + Low Haze	Affordable Adhesion AND Retortable	Flexible Packaging

<b>North America</b> U.S. & Canada	1 800 441 4369	Europe/Middle East	00 800 3694 6367 00 31 115 672626	dow.com dowelastomers.com
	1 989 832 1426	Italy	800 783 825	
Mexico	+ 18004414369	South Africa	00 800 99 5078	
Latin America		Asia Pacific	+ 800 7776 7776	
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