

Dynalloy™ OBC8000-T60

Thermoplastic Elastomer

GLS Thermoplastic Elastomers

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Dynalloy™ OBC8000-T60 is an easy processing, general processing TPE utilizing the unique rubber properties of Dow INFUSE™ Olefin Block Copolymers. Designed for a wide variety of applications, including applications requiring FDA compliances

- Adhesion to Polypropylene
- Enhanced Flow
- Excellent Colorability
- Warm, Non-tacky, Rubbery

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Good Colorability • Good Flow
Uses	• Consumer Applications • Overmolding • Soft Touch Applications • Transparent or Translucent Parts
Agency Ratings	• FDA Unspecified Rating
RoHS Compliance	• RoHS Compliant
Appearance	• Translucent
Forms	• Pellets
Processing Method	• Extrusion • Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	0.880	0.878 g/cm ³	ASTM D792
Molding Shrinkage - Flow (70°F (21°C))	0.010 to 0.016 in/in	1.0 to 1.6 %	ASTM D955

Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress ^{3,4} (300% Strain, 73°F (23°C))	360 psi	2.48 MPa	ASTM D412
Tensile Strength ^{3,4} (Break, 73°F (23°C))	610 psi	4.21 MPa	ASTM D412
Tensile Elongation ^{3,4} (Break, 73°F (23°C))	760 %	760 %	ASTM D412
Compression Set (73°F (23°C), 22 hr)	30 %	30 %	ASTM D395B

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore A, 10 sec)	60	60	ASTM D2240

Fill Analysis	Nominal Value (English)	Nominal Value (SI)	Test Method
Apparent Viscosity			ASTM D3835
392°F (200°C), 1340 sec ⁻¹	42.8 Pa·s	42.8 Pa·s	
392°F (200°C), 11200 sec ⁻¹	9.80 Pa·s	9.80 Pa·s	

Injection	Nominal Value (English)	Nominal Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	330 to 370 °F	166 to 188 °C
Middle Temperature	350 to 390 °F	177 to 199 °C
Front Temperature	390 to 430 °F	199 to 221 °C
Nozzle Temperature	390 to 430 °F	199 to 221 °C
Processing (Melt) Temp	380 to 440 °F	193 to 227 °C
Mold Temperature	80.0 to 100 °F	26.7 to 37.8 °C
Back Pressure	0.00 to 80.0 psi	0.00 to 0.552 MPa
Screw Speed	50 to 100 rpm	50 to 100 rpm



Injection Notes

Color concentrates with polypropylene (PP), ethylene vinyl acetate (EVA), or low density polyethylene (LDPE) carriers are most suitable for coloring Dynalloy™ OBC8000-T60. Improved color dispersion can be achieved by using higher melt flow concentrates (with a melt flow from 25 - 40 g/10 min). Typical loadings for color concentrates are 1% to 5% by weight. Liquid color can be used, but mineral oil based carriers may have a significant effect on the final hardness value. Concentrates based on PVC should not be used. A high color match consistency can be obtained by using precolored compounds available from GLS. The final determination of color concentrate suitability should be determined by customer trials.

Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polystyrene (PS) or polypropylene (PP).

Regrind levels up to 20% can be used with Dynalloy™ OBC8000-T60 with minimal property loss, provided that the regrind is free of contamination. To minimize losses during molding, the melt temperature should remain as low as possible. The final determination of regrind effectiveness should be determined by the customer.

Dynalloy™ OBC8000-T60 has good melt stability. Maximum residence times may vary, depending on the size of the barrel. Generally, the barrel should be emptied if it is idle for periods of 8 - 10 minutes or longer.

Drying is not Required

Injection Speed: 1 to 3 in/sec

1st Stage - Boost Pressure: 200 to 900 psi

2nd Stage - Hold Pressure: 20% of Boost

Hold Time (Thick Part): 4 to 10 sec

Hold Time (Thin Part): 1 to 4 sec

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ Die C

⁴ 2 hr



Dynalloy™ OBC8000-T60

Thermoplastic Elastomer

GLS Thermoplastic Elastomers

PROSPECTOR®

www.ulprospector.com

Where to Buy

Supplier

GLS Thermoplastic Elastomers

McHenry, IL USA

Telephone: 800-457-8777

Web: <http://www.glscorp.com/>

Distributor

PolyOne Distribution

PolyOne Distribution is a global distribution company. Contact PolyOne Distribution for availability of individual products by country.

Telephone: 800-894-4266

Web: <http://polyonedistribution.com/>

Availability: Global

