



DOW™ HDPE 40055L

High Density Polyethylene Resin

Overview

HDPE 40055L is a bimodal High Density Polyethylene resin that combines outstanding environmental stress crack resistance (ESCR) with good stiffness and impact resistance. Its rheological characteristics make it ideal for the production of medium size containers

Applications:

- Jerrycans and medium size containers for:
 - Aggressive liquids (e.g. detergents, surfactants, etc)
 - Chemicals
 - Agrochemicals
 - Food products
- Containers requiring UN approval for the transport of dangerous goods
- Industrial parts
- Sheet extrusion

Complies with:

- FDA regulation 177.1520(c)3.2a

Consult the regulations for complete details.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.953 g/cm ³	0.953 g/cm ³	ASTM D792
Melt Index			ASTM D1238
190°C/5.0 kg	0.41 g/10 min	0.41 g/10 min	
190°C/21.6 kg	10 g/10 min	10 g/10 min	
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 100% Igepal, F50	> 1000 hr	> 1000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	3630 psi	25.0 MPa	
Break	5800 psi	40.0 MPa	
Tensile Elongation (Break)	900 %	900 %	ASTM D638
Flexural Modulus - 2% Secant	126000 psi	870 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	7.5 ft-lb/in	400 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	69	69	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	261 °F	127 °C	ASTM D1525

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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