

DOW™ HDPE 40055L

High Density Polyethylene Resin
The Dow Chemical Company

Technical Data

Product Description

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.

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• The Dow Chemical Company
Availability	• Latin America
Agency Ratings	• FDA 21 CFR 177.1520(c) 3.2a
Forms	• Pellets

Physical	Nominal Value Unit	Test Method
Specific Gravity	0.953 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)		ASTM D1238
190°C/21.6 kg	10 g/10 min	
190°C/5.0 kg	0.41 g/10 min	
Environmental Stress-Cracking Resistance		ASTM D1693
50°C, 100% Igepal, F50	> 1000 hr	

Mechanical	Nominal Value Unit	Test Method
Tensile Strength		ASTM D638
Yield	25.0 MPa	
Break	40.0 MPa	
Tensile Elongation (Break)	900 %	ASTM D638
Flexural Modulus - 2% Secant	870 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C)	400 J/m	ASTM D256

Hardness	Nominal Value Unit	Test Method
Durometer Hardness (Shore D)	69	ASTM D2240

Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature	127 °C	ASTM D1525

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.