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/cm³	0.953	g/cm³	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.