

High Density Polyethylene HDP0353

Description:

HDP0353 is a high-density polyethylene copolymer developed for solid wall and corrugated piping applications; it has a **PE435580A** cell classification, conforming to **ASTM D3350**. This resin is recommended for use in applications that are required to meet **AASHTO M294** and **ASTM D3350** specifications.

This material is designed to meet the requirements of **UL 651A** and **NEMA TC-7**; laboratory tests for certification would need to be performed on the manufactured pipe by the converter.

Applications:

Natural bimodal high density polyethylene copolymer, resin designed for solid wall and corrugated pipes of small and large diameter, and telecommunications conduits.

Processes:

Pipes extrusion

Control Properties:

Feature	Method	Units	Values
Melt Flow Rate (190°C/2.16kg)	ASTM D1238	g/10 min	0.35
Density	ASTM D792	g/cm ³	0.953

Typical Properties¹

Feature	Method	Units	Values
Tensile Strength at Yield	ASTM D638	MPa	26
Tensile Strength at Break	ASTM D638	MPa	38
Strain at Break	ASTM D638	%	665
Flexural Modulus (Secant 1%)	ASTM D790	MPa	1275
Izod Impact Strength ³	ASTM D 256	J/m	165
Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	70
Vicat Softening Point (10 N)	ASTM D1525	°C	126
Oxidative Induction Time (OIT, 200°C)	ASTM D 3895	min	45
Hardness Shore D	ASTM D 2240	-	65
Brittleness Temperature	ASTM D746	°C	<-75
ESCR (10% Igepal) ²	ASTM D1693	h	>1500
ESCR (100% Igepal) ²	ASTM D 1693	h	>1500

¹ Test specimens from compression molded plaque according to ASTM D4703.

² Condition B.

³ Test temperature at 23°C.

Final Remarks

1. It is the sole responsibility of the Client/Purchaser of this Product to verify the suitability of this Product and its use for the intended use and to ensure compliance with legal and regulatory requirements applicable to the final product.
2. The technical guidance eventually rendered to the Client/Purchaser of the Product by Braskem about the Product does not characterize a performance guarantee for the intended application, nor does it exempt the Client/Purchaser from the responsibilities described in item 1 above.
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