



FINGERPRINT™ DFDA-7510 NT

The Dow Chemical Company - Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

FINGERPRINT™ DFDA-7510 NT Linear Low Density Polyethylene Resin is produced using UNIPOL™ process technology. It is intended for use in micro irrigation tube, durable hose and tube, profile extrusion, and injection molded fittings applications.

It also has utility as a blending component to modify and improve the physical properties of high pressure, very low density, linear low density, or high density polyethylene resins. Outdoor applications require the addition of UV stabilizer to maintain the excellent properties over extended periods of UV exposure.

Main Characteristics:

- Outstanding ESCR
- Excellent burst strength
- Excellent consistency and extrusion characteristics
- Excellent flexibility for easy roll-out

Slip Additive: none

Antiblock Additive: none

Industrial Standards Compliance:

- ASTM D 3350: cell classification PE123110A

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• ASTM D3350 PE123110A		
Forms	• Pellets		
Processing Method	• Profile Extrusion		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.922		ASTM D792
Melt Mass-Flow Rate			ASTM D1238
190°C/2.16 kg	0.60	g/10 min	
190°C/21.6 kg	44	g/10 min	
Environmental Stress-Cracking Resistance (ESCR) ² (F0)	> 500	hr	ASTM D1693A
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (Yield)	1600	psi	ASTM D638
Tensile Strength ³ (Break)	2250	psi	ASTM D638
Tensile Elongation ³ (Break)	800	%	ASTM D638
Flexural Modulus ³	45000	psi	ASTM D790
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness ³ (Shore D)	44		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature ³	< -148	°F	ASTM D746A

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Processing Information

Extrusion	Nominal Value	Unit
Melt Temperature	385 to 430	°F

Extrusion Notes

Fabrication Conditions For Blown Film:

- Screw Type: All standard commercial extrusion equipment.
- Melt Temperature Range: 385 - 430 °F (196 - 221 °C)

Notes

¹ Typical properties: these are not to be construed as specifications.

² As guided by D3350; Compression molded parts prepared according to ASTM D 1928 Procedure C. Properties will vary with changes in molding conditions and aging time.

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