

CHARACTERISTICS

The Lintech® FA-41 resin is a Linear Low Density Polyethylene, copolymer of octene-1, produced by solution process, for blown film extrusion with excellent mechanical properties. It contains processing aid, antiblock and antioxidant additive.

APPLICATIONS

Heavy duty industrial bags, liners, laminating and specialties made of high strength films.

PROCESSING

Pure - The Lintech® FA-41 resin should be processed on specific extruders for LLDPE. The optimum processing conditions will vary according to the type of equipment used, but the best results are obtained at a melt temperature within the range of 200 to 220°C. Recommended blow up ratio: 1.8 to 3.0:1. Blends - The Lintech® FA-41 resin can be processed with LDPE on conventional extruders with a maximum ratio of 30%. The best results are obtained with polyethylene resins of low melt index. The recommended temperature profile for these blends is slightly higher than for conventional LDPE (10 to 20°C).

Property	ASTM Method	Typical Value	Unit	
RESIN	Melt Index (2.16kg/190 °C)	D 1238	0.75	g/10min
	Density	D 792	0.919	g/cm ³
	Molecular Weight Distribution	Politeno	Narrow	-
	Brittleness Temperature	D 746	-70	°C
	Vicat Softening Point	D 1525	105	°C
	Ultimate Tensile Strength	D 638	27	MPa
	Elongation at Break	D 638	850	%
	Ultimate Tensile Strength	D882	-	-
	DM		55	MPa
	DT		42	MPa
FILM	Tensile Yield Strength	D882	-	-
	DM		12	MPa
	DT		12	MPa
	Elongation at Break	D 882	-	-
	DM		700	%
	DT		850	%
	Tear Strength	D1922	-	-
	DM		15.0	gf/μm
	DT		25.0	gf/μm
	Impact Strength F50	D 1709/A (1)	5.0	gf/μm
Gloss - 45°	D2457	35	%	
Haze	D1003	25	%	
Kinetic Coefficient of Friction (COF)	D1894	0.55	-	

(1) 3,8cm dart, at 66cm drop height.

Obs.:The film used on the properties analysis was obtained from a 63mm extruder, L/D= 24, die gap of 1.5mm, thickness of 25μm and the blow-up ratio of 2:1. The values of the table above are typical of the processing conditions mentioned. MD= Machine Direction. TD= Transversal Direction.

NOTES

- This resin is in accordance to the U.S. F.D.A. regulation 21 CFR section 177.1520, entitled "Olefin Polymers", existing since the publication of this specification.
- This product has register at Adolfo Lutz Institute for food contact
- Melt Index and Density are traceable tests. Other are reference tests.
- Properties have been determined in accordance with the current issues of the specified testing methods.
- Considerations on Handling, Safety and Disposal should be observed on Politeno's Product Line general catalogue.
- Any other information concerned to our products performance could be cleared any time directly with Politeno's Technical Assistance and Product Development team.
- Other information in this bulletin are presented in good faith.
- This product data sheet is effective as from January/2001 and supersedes all previously published data.

LEGENDS

- ASTM - American Society for Testing Materials.