

Technical Data Sheet

PETILEN F5-21T
Low Density Polyethylene (LDPE)**Description**

PETILEN F5-21T is a low density polyethylene resin produced by high pressure tubular process. The product is developed especially for very thin blown film applications.

Applications

Film extrusion: textile packaging, mulch film, lamination, thin film applications

Additives

PETILEN F5-21T contains medium level of anti-blocking and slip agent.

Compliance to Regulations

The formulation and production of PETILEN F5-21T conforms to the compositional requirements of the Commission Regulation (EU) No. 10/2011.

Properties	Typical Values (*)	Units	Test Methods
Resin Properties			
Melt Flow Rate (190°C/2.16 kg)	4.7	g/10 min	ASTM D1238
Density, 23°C	0.921	g/cm ³	ASTM D1505
Melting Point (DSC, 2nd heating)	108	°C	ASTM D3418
Film Properties (**)			
Tensile Strength at Yield, MD	11	MPa	ASTM D882
Tensile Strength at Yield, TD	10	MPa	ASTM D882
Tensile Strength at Break, MD	22	MPa	ASTM D882
Tensile Strength at Break, TD	15	MPa	ASTM D882
Elongation at Break, MD	>100	%	ASTM D882
Elongation at Break, TD	>450	%	ASTM D882
Tear Strength, MD	240	cN	ASTM D1922
Tear Strength, TD	180	cN	ASTM D1922
Coefficient of Friction	<0.2	-	ASTM D1894
Optical Properties			
Haze	6.8	%	ASTM D1003
Gloss, 45°	73	GU	ASTM D2457
Thermal Properties			
Vicat Softening Point, 10 N	88	°C	ASTM D1525

(*) These are typical properties only and are not to be construed as specifications. Customers should confirm results by their own tests.

(**) Film properties are measured on 35 µm blown film, Blow up ratio (BUR) 2.5:1, melt temperature ~170°C.

MD: Machine Direction, TD: Transverse Direction.

Technical Data Sheet

PETILEN F5-21T

Low Density Polyethylene (LDPE)



Recommended Processing Conditions

Blown film extrusion applications;
Typical zone temperatures: 140 - 180°C
Typical melt temperature: 160 -180°C
Typical blow-up ratio (BUR): 2:1 - 3:1

Processing conditions should be optimized for different equipment design.

Health, Safety and Food Contact Regulations

The detailed information of the PETILEN F5-21T product is given in Safety Data Sheet and Food Contact Declaration of the product. Please contact your sales representatives or visit web site for the food contact application compliance (e.g. EU, FDA) and other regulatory documents.

Packing and Storage

The material is packaged in PE bags or in PP Big Bags. The product should be stored in a dry area with an ambient temperature below 50°C. It should be kept away from sunlight, sparks, heat and flame. Inappropriate storage conditions can lead to bad smell, color changes and the deterioration in physical properties. It is advised to process PE resins within 6 months after delivery.

Recycling

The product is not hazardous or toxic and it is suitable for recycling using available recycling methods.

Medical Applications Policy

The product mentioned herein is not tested for use in pharmaceutical/medical applications. It is the responsibility of the final product manufacturer to determine that PETKİM product is suitable for intended use.

Disclaimer

© 2022 PETKİM PETROCHEMICAL HOLDING INC. The user may photocopy, distribute and/or forward this document only if unaltered and complete including its headers, footers and other information. You may not publish this document on a website. PETKİM does not guarantee the typical values. The information in this document relates only to the given product when not in combined or compounded with any other materials. The information in this document is based on data reliable on the date compiled. PETKİM may add, remove and/or update information in this document at any time without noticing the users. PETKİM does not guarantee the merchantability, suitability, fitness for particular purpose, accuracy, reliability or completeness of this information or the products specified. The user is solely responsible for any use of the product at any process. PETKİM disclaims liability for any loss, damage or injury directly or indirectly suffered or incurred as a result or related to anyone using or relying on any information in this document.