



ecoflex® F Blend C1200

BASF Corporation - Copolyester

Sunday, November 3, 2019

General Information

Product Description

ecoflex® F Blend C1200 is our biodegradable, statistical, aliphatic-aromatic copolyester based on the monomers 1,4-butanediol, adipic acid and terephthalic acid in the polymer chain. ecoflex® F Blend C1200 will biodegrade to the basic monomers 1,4-butanediol, adipic acid and terephthalic acid and eventually to carbon dioxide, water and biomass when metabolized in the soil or compost under standard conditions.

ecoflex® F Blend C1200 has properties similar to PE-LD because of its high molecular weight and its long chain branched molecular structure.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Aliphatic • Aromatic • Biodegradable • Branched Polymer Structure • Compostable	• Food Contact Acceptable • Good Printability • Good Processability • Good Thermal Stability • High Elongation	• High Molecular Weight • Semi Crystalline • Weldable
Uses	• Agricultural Applications • Bags	• Blown Film • Cast Film	• Packaging
Agency Ratings	• ASTM D6400 • DIN EN 13432	• EC 1907/2006 (REACH) • EU 2002/72/EC	• FDA FCN 907
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Translucent	
Forms	• Pellets		
Processing Method	• Blown Film	• Cast Film	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.25 to 1.27	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.7 to 4.9	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	2.50 to 4.50	cm ³ /10min	ISO 1133
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	2	mil	
Tensile Strength			ISO 527-3
MD : 2.0 mil, Blown Film	5080	psi	
TD : 2.0 mil, Blown Film	6380	psi	
Tensile Stress			ISO 527-3
MD : Break, 2.0 mil, Blown Film	5220	psi	
TD : Break, 2.0 mil, Blown Film	6530	psi	
Tensile Elongation			ISO 527-3
MD : Break, 2.0 mil, Blown Film	560	%	
TD : Break, 2.0 mil, Blown Film	710	%	
Oxygen Transmission Rate			ASTM D3985
73°F, 0% RH, 2.0 mil, Blown Film	77	cm ³ /100 in ² /24 hr	
Water Vapor Transmission Rate			ASTM F1249
73°F, 85% RH, 2.0 mil, Blown Film	8.7	g/100 in ² /24 hr	

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Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	32		ISO 868
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	196	°F	ISO 306/A50
Melting Temperature	230 to 248	°F	DSC
Optical	Nominal Value	Unit	Test Method
Transmittance (1.97 mil, Blown Film)	82.0	%	ASTM D1003
Additional Information	Nominal Value	Unit	Test Method
Failure Energy - Dyna Test ² (2.0 mil)	450	ft·lb/in	DIN 53373

Notes

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

² Blown Film