

Technipol® Bio 1160
PBAT

Sipol spa Società Italiana Polimeri

Technipol® Bio 1160 is an aromatic - aliphatic copolyester, characterized by medium crystallinity and a low melting point. Due to its formulation, it can be used in biodegradable and compostable compounds. Furthermore it exhibits a good compatibility with other biodegradable polymers as polylactic acid and starch. It can be used as support polymer for master-batches both in granules and in powderform. Usable for injection molding.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	16	cm³/10min	ISO 1133
Temperature	160	°C	-
Load	2.16	kg	-
Molding shrinkage, normal	1.8	%	ISO 294-4, 2577
Melt Flow Index, MFI	20	g/10min	ISO 1133
MFI temperature	160	°C	-
MFI load	2.16	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Stress at Break	17	MPa	ISO 527
Strain at Break	365	%	ISO 527
Flexural Modulus (23°C)	60	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	no break	kJ/m²	ISO 180/1A
Compression Set under constant strain, 23°C	34	%	ISO 815
Compression Set under constant strain, 70°C	48	%	ISO 815
Abrasion resistance	74.5	mm³	ISO 4649
Shore Hardness D (15s)	34	-	ISO 868

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	115	°C	ISO 11357-1/-3
Glass Transition Temperature (10°C/min)	-35	°C	ISO 11357-1/-2
Vicat softening temperature A	69	°C	ISO 306

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1230	kg/m³	ISO 1183

Characteristics
Processing

Injection Molding

Delivery form

Pellets

Features

Blending Resin, Copolymer

Certifications

Biodegradable, Food approval, Food approval 10/2011, Food Contact (FDA)