

DURANEX® 3105H

Technical DataSheet | Supplied by Polyplastics (Daicel)

DURANEX® 3105H is a polybutylene terephthalate (PBT) polyester grade reinforced with 15 % glass fiber. Possesses good mechanical & impact strength, moldability, good texture and aroma retaining properties. Exhibits dimensional stability, good processability and enhanced elongation. Offers fuel-, grease-, oil and abrasion resistance. Is suitable for processing by injection molding. Used in electrical and automotive applications. Complies with UL and RoHS regulations.

Product Type	Polyester > PBT
Physical Form	Pellets
Product Status	COMMERCIAL
Applications/ Recommended for	Electrical markets Automotive Injection molding - thermoplastics
Labels/Agency Rating	UL E213445 RoHS
Key Features	Abrasion resistance, Good Dimensional stability, Good Elongation, High Filled, Glass Fiber Impact Resistance, Good Moldability, Good Processability, Good Strength, Good Fuel Resistant Grease Resistant Oil Resistant

DURANEX® 3105H Properties

Mechanical	Value & Unit	Test Condition	Test Method
Tensile Strength	108 MPa		ISO 527-1,2
Nominal Strain	3.3 %	at Break	ISO 527-1/-2
Flexural Strength	170 MPa		ISO 178

Flexural Modulus	5270 MPa	ISO 178
Impact Strength, Notched Charpy	6.6 KJ/m ²	ISO 179/1eA
Hardness, Rockwell M	95	ISO 2039-2

Physical	Value & Unit	Test Condition	Test Method
Density	1.41 g/cm ³		ISO 1183
Water Absorption	0.2 %	At 23°C, 24 hr	ISO 62

Flammability	Value & Unit	Test Condition	Test Method
Flame Rating, UL 94	HB		

Electrical	Value & Unit	Test Condition	Test Method
Dielectric Strength	20 kV/mm	At 3 mm	IEC 60243-1
Volume Resistivity	5 × 10 ¹⁶ ohm-cm		IEC 60093

Thermal	Value & Unit	Test Condition	Test Method
CTE, Linear, Parallel to Flow	4 × 10 ⁻⁵ /°C	At 23 to 55°C	
CTE, Linear, Transverse to Flow	10 × 10 ⁻⁵ /°C	At 23 to 55°C	

Heat Deflection Temperature (HDT), Unannealed	206 °C	At 264 Psi (1.82 MPa)	ISO 75
---	--------	-----------------------	--------

DURANEX® 3105H Processing Guidelines

Injection Molding	Value & Unit	Test Condition	Test Method
Cylinder Temperature	250 - 270 °C		
Mold Temperature	40 - 80 °C		
Holding Pressure	60 - 100 MPa		
Screw Speed	100 - 150 rpm		
Moisture Content	< 0.02 %		
Vent Depth	< 0.02 mm		

东莞市展羽塑胶原料有限公司

