

Description

Reents Technologies PET-CF15 UL94 HB is specifically developed for industrial applications and is characterized by its high strength and rigidity due to the carbon fiber reinforcement. It is ideal for the production of components subjected to high mechanical stress and demanding environments. The material is flame retardant according to UL 94 HB and has excellent thermal stability.

Identification

Name	PET-CF15 UL94 HB
Chemical Name	Polyethylene Terephthalate with Carbon Fiber
Usage	Ideal for manufacturing mechanically stressed industrial components

Advantages

- For industrial applications
- Flame retardant according to UL 94 HB
- High mechanical stability and rigidity
- Excellent thermal stability
- Low water absorption

Properties

Mechanical properties

Test	Value	Unit	Methode
Density	1.4	g/cm ³	ISO 1183-3
Water absorption	<0.3	%	ISO 62
Tensile Strength	80	MPa	ISO 527
Elongation at Max Force	2.5	%	ISO 527
Modulus of Elasticity	9	GPa	ISO 527
Flexural Strength	130	MPa	ISO 178
Flexural Elongation at Max Force	3.5	%	ISO 178
Flexural Modulus	8	GPa	ISO 178
Charpy Impact Strength	40	KJ/m ²	ISO 179 1eU

Thermal Properties

Test	Value	Unit	Methode
Service Temperature	125	°C	during lifetime max. 200h
Flammability	UL94 HB		

Certificate

REACH	Yes
RoHS	Yes
Flame retardant	UL94 HB