

Composite PP

TH53

High heat-resistant PP composite

Application

Electrical and electronic parts, Electrical and electronics exterior parts, industrial parts

Characteristics

Excellent heat-resistance and dimensional stability, Excellent stiffness, Excellent processability, Excellent long-term thermal resistance, Excellent anti-static properties

Physical properties

Item	Test Method	Unit	Typical Value
Melt index (230°C)	ASTM D1238	g/10min	13
Specific gravity	ASTM D792	g/cm ³	1.15
Tensile strength (at yield)	ASTM D638	kg/cm ²	380
Elongation (at break)	ASTM D638	%	20
Flexural strength	ASTM D747	kg/cm ²	65
Flexural modulus	ASTM D790	kg/cm ²	41,000
Izod Impact Strength (23°C)	ASTM D256	kg cm/cm	3.5
Rockwell hardness	ASTM D785	R scale	105
Heat distortion temperature	ASTM D648	°C	147
Shrinkage Ratio	HTC METHOD	%	0.8 ~ 1.2
Flame-retardancy	UL94	-	HB

Note: The above physical property value is a representative value for reference and is not a product quality standard.

Processing conditions

Item	Unit	Typical value
Feeding zone temperature	°C	180 ~ 200
Plasticizing zone temperature	°C	190 ~ 210
Metering zone temperature	°C	200 ~ 220
Mold temperature	°C	40 ~ 80
Screw	rpm	30 ~ 80
Injection pressure	kg/cm ²	600 ~ 1,000
Holding pressure	kg/cm ²	400 ~ 900

※ Actual injection conditions should be adjusted according to the type of injection machine, mold, and part size.



Certification

For further inquiries, please contact Hanwha TotalEnergies Petrochemical Composite Development Team.

Contact information

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