

TRIEL® 5451GP

Samyang Corporation - Thermoplastic Polyester Elastomer

General Information

Product Description

TRIEL® offers significant chemical resistance, thermal resistance, weatherability and low temperature flexibility.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Forms	• Pellets

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.16		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	11	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.015 to 0.017	in/in	ASTM D955
Water Absorption (24 hr, 73°F)	0.50	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D638
5.0% Strain	853	psi	
10% Strain	1210	psi	
50% Strain	1850	psi	
Tensile Strength (Break)	2990	psi	ASTM D638
Tensile Elongation (Break)	> 400	%	ASTM D638
Flexural Modulus	13100	psi	ASTM D790
Flexural Strength (Yield)	782	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Unnotched Izod Impact			ASTM D4812
-40°F	No Break		
73°F	No Break		
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	45		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	163	°F	ASTM D648
Vicat Softening Temperature	322	°F	ASTM D1525 ²
Melting Temperature	410	°F	ASTM D2117

Notes

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

² Rate B (120°C/h), Loading 1 (10 N)
