

# Polifil® PP T-40

Polypropylene Homopolymer

The Plastics Group

## Message:

Polifil® T series compounds are homopolymer polypropylene resins reinforced with appearance-grade talc. They possess high flex modulus, high deflection temperature, good chemical resistance, and colorability, low shrinkage, and yield maximum stiffness combined with characteristic impact. These compounds are used in automotive applications, major appliances, electrical goods, and housewares, and other utility products. Standard processing techniques are applicable. Use this information as a guide to aid you in selecting the proper resin for your application. TPG will custom compound and fine-tune our formulations for your application.

General Information			
UL YellowCard	E84888-251660		
Filler / Reinforcement	Talc,40% Filler by Weight		
Features	Good Chemical Resistance		
	Good Colorability		
	Good Flexibility		
	Good Impact Resistance		
	Good Stiffness		
	High Heat Resistance		
	Homopolymer		
Uses	Low Shrinkage		
	Appliances		
	Automotive Applications		
	Electrical Parts		
Forms	Household Goods		
	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.24	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	8.0 to 12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.18 mm)	0.80	%	ASTM D955
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	77		ASTM D1415
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	2620	MPa	ASTM D638
Tensile Strength (23°C)	31.7	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield, 23°C	3.5	%	
Break, 23°C	10	%	

Flexural Modulus - Tangent (23°C)	2760	MPa	ASTM D790
Flexural Strength (23°C)	55.2	MPa	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact (23°C)	27	J/m	ASTM D256
Gardner Impact (23°C, 12.7 mm)	0.565	J	ASTM D3029
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	138	°C	
1.8 MPa, Unannealed	79.4	°C	
<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>	
Drying Temperature	82.2 to 104	°C	
Drying Time	1.0 to 2.0	hr	
Rear Temperature	199 to 210	°C	
Middle Temperature	210 to 221	°C	
Front Temperature	221 to 232	°C	
Nozzle Temperature	227 to 232	°C	
Processing (Melt) Temp	204 to 260	°C	
Mold Temperature	10.0 to 26.7	°C	
Injection Rate	Fast		
Back Pressure	0.345 to 0.689	MPa	
Screw Speed	50 to 100	rpm	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT