

SABIC® STAMAX 40YM243 resin

Polypropylene

SABIC Innovative Plastics

Message:

SABIC® STAMAX 40YM243 is a 40% long glass fiber reinforced UV stabilized polypropylene. The glass fibers are chemically coupled to the PP matrix, resulting in high stiffness and strength. The IMDS is 209768490.

General Information			
Filler / Reinforcement	Long glass fiber, 40% filler by weight		
Additive	UV stabilizer		
Features	Rigidity, high		
	High strength		
	Chemical coupling		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.21	g/cm ³	ASTM D792
--	1.22	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	8470	MPa	ASTM D638
--	8300	MPa	ISO 527-2/1
80°C	5700	MPa	ISO 527-2/1
120°C	4500	MPa	ISO 527-2/1
Tensile Strength			
Fracture ²	108	MPa	ASTM D638
Fracture	121	MPa	ISO 527-2/1A/50
Fracture, 80°C	75.0	MPa	ISO 527-2/1A/50
Fracture, 120°C	54.0	MPa	ISO 527-2/1A/50
Tensile Elongation			
Fracture ³	1.8	%	ASTM D638
Fracture	2.1	%	ISO 527-2/50
Flexural Modulus			
50.0mm span ⁴	7680	MPa	ASTM D790
64.0mm span ⁵	7850	MPa	ISO 178
80°C, 64.0mm span ⁶	5550	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C ⁷	28	kJ/m ²	ISO 179/1eA

23°C ⁸	22	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength ⁹			ISO 179/1eU
-30°C	48	kJ/m ²	ISO 179/1eU
23°C	68	kJ/m ²	ISO 179/1eU
Notched Izod Impact ¹⁰ (23°C)	18	kJ/m ²	ISO 180/1A
Instrumented Dart Impact ¹¹ (23°C, Energy at Peak Load)	8.10	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
1.8 MPa, unannealed, 3.20mm	158	°C	ASTM D648
1.8 MPa, not annealed ¹²	157	°C	ISO 75-2/A
Additional Information	Nominal Value	Unit	Test Method
Glass Fiber Content	40	%	ISO 3451
Injection	Nominal Value	Unit	
Drying Temperature	80.0 - 100	°C	
Drying Time	2.0	hr	
Rear Temperature	230 - 290	°C	
Middle Temperature	225 - 285	°C	
Front Temperature	220 - 280	°C	
Nozzle Temperature	220 - 280	°C	
Processing (Melt) Temp	220 - 280	°C	
Mold Temperature	20.0 - 80.0	°C	
Back Pressure	0.00 - 0.500	MPa	
Injection instructions			
Screw Speed: Lowest Possible			
NOTE			
1.	50 mm/min		
2.	Type 1, 50mm/min		
3.	Type 1, 50mm/min		
4.	1.3 mm/min		
5.	2.0 mm/min		
6.	2.0 mm/min		
7.	80*10*4mm, Cut		
8.	80*10*4 mm, Cut		
9.	80*10*4mm, Cut		
10.	80*10*4mm, Cut		
11.	6.60 m/sec		
12.	80*10*4mm, Cut		

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.

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

