

# Hanwha Total PP SI51C

Polypropylene

HANWHA TOTAL PETROCHEMICALS Co., Ltd.

## Message:

SI51C is a high gloss polypropylene compound with improved heat resistance. This product has the high heat-resistance required for use in electric heating equipment parts, as well as superior surface gloss and scratch-resistance. SI51C is one of Korea's best high heat-resistant, high glossy compound products. SI51C is designed for the exterior housings of household appliances which require an elegant appearance, such as rice cookers, toasters, irons, jars, pots, and bread makers.

General Information			
UL YellowCard	E140331-222951		
Features	Rigidity, high		
	Highlight		
	m-benzene dimethyl		
	Crystallization		
	Impact resistance, high		
	Workability, good		
	Scratch resistance		
	Heat resistance, high		
	Durability		
Uses	Good appearance		
	Electrical/Electronic Applications		
	Electrical appliances		
	Household goods		
	Food container		
Forms	Shell		
	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.00	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (2.00 mm)	1.3 - 1.5	%	ASTM D955
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	110		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>1</sup> (Yield)	39.2	MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	100	%	ASTM D638
Flexural Modulus <sup>3</sup>	2450	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	39	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa, Unannealed)	140	°C	ASTM D648
Flammability	Nominal Value		Test Method
Flame Rating	HB		UL 94
Additional Information			
UL746B: 120 °C			
Injection	Nominal Value	Unit	
Rear Temperature	170 - 190	°C	
Middle Temperature	180 - 200	°C	
Front Temperature	180 - 210	°C	
Nozzle Temperature	180 - 210	°C	
Mold Temperature	50.0 - 70.0	°C	
Injection Pressure	39.2 - 68.6	MPa	
Back Pressure	0.490 - 1.96	MPa	
Injection instructions			
Injection Speed: 40 to 70 %			
NOTE			
1.	50 mm/min		
2.	50 mm/min		
3.	5.0 mm/min		

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#### Recommended distributors for this material

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