# Hanwha Total PP SH53C

### Polypropylene

HANWHA TOTAL PETROCHEMICALS Co., Ltd.

#### Message:

SH53C is a polypropylene that displays improved heat resistance and dimensional stability when compared to other high gloss PP brands.

Often, other high gloss brands have the gloss but a much lower resistance to thermal strain, unsuitable for use in electric heating equipment. This grade is popularly used in high-temperature electric heating equipment.

General Information				
UL YellowCard	E140331-222949			
Features	Good dimensional stability			
	Rigidity, high			
	Highlight			
	Impact resistance, high			
	Workability, good			
	Scratch resistance			
	Good chemical resistance			
	Heat resistance, high			
	Durability			
	Thermal stability, good			
Uses	Electrical/Electronic Applications			
	Electrical components			
	Electrical appliances			
	Household goods			
	Food container			
	Bathroom products			
Forms	Particle			
Processing Method	Injection molding			
Physical	Nominal Value	Unit	Test Method	
Specific Gravity	1.15	g/cm³	ASTM D792	
Melt Mass-Flow Rate (MFR) (230°C/2.16	11	g/10 min	ASTM D1238	
kg) Molding Shrinkage - Flow (2.00 mm)	1.0 - 1.3	%	ASTM D1238  ASTM D955	
Hardness	Nominal Value	Unit	Test Method	
Rockwell Hardness (R-Scale)	103	Offic	ASTM D785	
Mechanical	Nominal Value	Unit	Test Method	
Tensile Strength <sup>1</sup> (Yield)	35.3	MPa	ASTM D638	
Tensile Strength (Yield)  Tensile Elongation <sup>2</sup> (Break)	15	мга %		
Flexural Modulus <sup>3</sup>			ASTM D700	
FIEXUIDI IVIOUUIUS	3330	MPa	ASTM D790	

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	41	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa, Unannealed)	142	°C	ASTM D648
Flammability	Nominal Value		Test Method
Flame Rating	НВ		UL 94
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		

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

