## Hanwha Total PP BI45W

High Crystallinity Polypropylene

HANWHA TOTAL PETROCHEMICALS Co., Ltd.

## Message:

BI45W is a polypropylene compound with super weatherability and is ideal for use in outdoor products such as the exteriors of air-conditioning systems. This grade uses a base PP, such as HIPP (High Isotactic Polypropylene),

and is manufactured with special processing technology to provide customers with a product of the best quality. This grade possess heightened rigidity, impact-resistance, long-term heat-resistance, as well as protection against thermal discoloration and anti-static property.

UL YellowCard     E140331-222884       Additive     Antistatic       Features     Antistatic       Good Processability     Good Processability       Good Wermal Stability     Good Wermal Stability       Uses     Containers       Electrical Parts     Electrical Parts       Electrical Velectronic Applications     Housings       Industrial Applications     Outdoor Applications       Processing Method     Injection Molding       Physical     Nominal Value     Unit       Pensity     0.910     g/r0 min       Molding Shrinkage - Flow (2.00 mm)     1.4 to 1.8     %       Molding Shrinkage - Flow (2.00 mm)     1.4 to 1.8     %       Molding Shrinkage - Flow (2.00 mm)     1.4 to 1.8     %       Molding Shrinkage - Flow (2.00 mm)     1.4 to 1.8     %       Molding Shrinkage - Flow (2.00 mm)     1.4 to 1.8     %     ASTM D1238       Molding Shrinkage - Flow (2.00 mm)     1.4 to 1.	General Information			
Features     Antistatic       Good Processability     Good Thermal Stability       Good Thermal Stability     Good Weather Resistance       High Heat Resistance     High Impact Resistance       High Rigidity     Isophthalic       Uses     Containers       Electrical Parts     Electrical Parts       Electrical Parts     Electrical/Electronic Applications       Housings     Industrial Applications       Outdoor Applications     Outdoor Applications       Processing Method     Injection Molding       Physical     Nominal Value     Unit       Density     0.910     g/cm³       Molding Shrinkage - Flow (200 mm)     1.4 to 1.8     %       Molding Shrinkage - Flow (200 mm)     1.4 to 1.8     %       Molding Shrinkage - Flow (2.00 mm)     99     ASTM D1505	UL YellowCard	E140331-222884		
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Rockwell Hardness (R-Scale) 99 ASTM D785	Molding Shrinkage - Flow (2.00 mm)	1.4 to 1.8	%	ASTM D955
	Hardness	Nominal Value	Unit	Test Method
Mechanical Nominal Value Unit Test Method	Rockwell Hardness (R-Scale)	99		ASTM D785
	Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>1</sup> 36.3 MPa ASTM D638	Tensile Strength <sup>1</sup>	36.3	MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)   50   %   ASTM D638	Tensile Elongation <sup>2</sup> (Break)	50	%	ASTM D638
Apparent Bending Modulus   50.0   MPa   ASTM D747	Apparent Bending Modulus	50.0	MPa	ASTM D747

Flexural Modulus <sup>3</sup>	1770	MPa	ASTM D790
	1770	МРа	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	88	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45			
MPa, Unannealed)	135	°C	ASTM D648
Injection	Nominal Value	Unit	
Rear Temperature	180 to 200	°C	
Middle Temperature	190 to 210	°C	
Front Temperature	200 to 220	°C	
Mold Temperature	40.0 to 80.0	°C	
Injection Pressure	58.8 to 98.1	MPa	
Holding Pressure	39.2 to 88.3	MPa	
Screw Speed	30 to 80	rpm	
NOTE			
1.	50 mm/min		
2.	50 mm/min		
3.	5.0 mm/min		

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