

# **COMPOUND PP**



Resin for Use in Automobile Engines and Air Conditioner Parts

## Description

Made from high crystalline PP, Hanwha's compound PP WH72 features superior mechanical properties that include outstanding flexural modulus, surface hardness and tensile strength. It is extremely effective when used on blower fans.

- ▶ Product weight Reduction;
  - Superior mechanical properties → Development of thin-wall product
  - $\rightarrow$  PP+G/F Grade substitution  $\rightarrow$  Improved recycling.

Main applications are in products requiring extra weld-line strength. It is also suitable for use in engines and air-conditioning systems due to superior heat-resistance.

### Characteristics

By forming  $\beta$ -crystalline PP and adding filler, Hanwha's compound PP WH72S features superior rigidity around weld lines as well as exceptional thermal-strain stability and long-term heat stability.

# Applications

▶ Blower Fans

## Physical Properties

#### **▶** Resin Properties

Properties		Test method	Units	WH72
Melt Index		ASTM D1238	g/10min	22
Specific Gravity		ASTM D792	g/cm3	1.02
Tensile strength at Yield		ASTM D638	kg/cm2	320
Elongation at Break			%	30
Flexural Modulus		ASTM D790	kg/cm2	31,000
Izod Impact Strength	23°C	ASTM D256	kg cm/cm	4.0
	-30°C			-
Rockwell Hardness		ASTM D785	R-scale	103
Heat Deflection Temp.		ASTM D648	${\mathbb C}$	135
Shrinkage ratio		HANWHA TOTAL method	%	1.2±0.2

<sup>\*</sup> Data shown above are representative values for reference purposes only, and not to be construed as specifications.

# Food Contact Application

- ► There may be some limitation to apply Hanwha Total WH72 to the food packaging
- ▶ Thus, the verification on the suitability is necessary. In case you might need additional information, please contact Hanwha Total Composite Development Team.

### Other Information

The information in this document can be used for reference only, not to be construed as specification. Customers are responsible for determine whether our product and information is suitable for their particular purpose and for the compliance with related law.

HANWHA TOTAL assumes no obligation or liability for the information in this document