

COMPOUND PP

Compound PP for Heat Resistance

- ▶ TB51
- ▶ TB52
- ▶ TB53
- ▶ TB54

● Description

Manufactured by adding an inorganic filler, talc to polypropylene, Samsung Total' heat-resistant PP compounds are designed for use in injection molding, and feature highly improved strength and heat-resistance.

Produced with a variety of base PPs, such as HIPP (High Isotactic or High Crystalline Polypropylene), Samsung Total' special processing technology results in PP of the highest quality.

These products feature superior rigidity and impact strength, long-term heat resistance and anti-static property. dimensional stability is another plus!

These Samsung Total products are widely used in electric and electronic parts, household appliances and automobiles.

● Characteristics

- ▶ Addition of an inorganic filler, talc enhances heat-resistance and dimensional stability;
- ▶ Superior strength and impact-resistance;
- ▶ Superior processability.

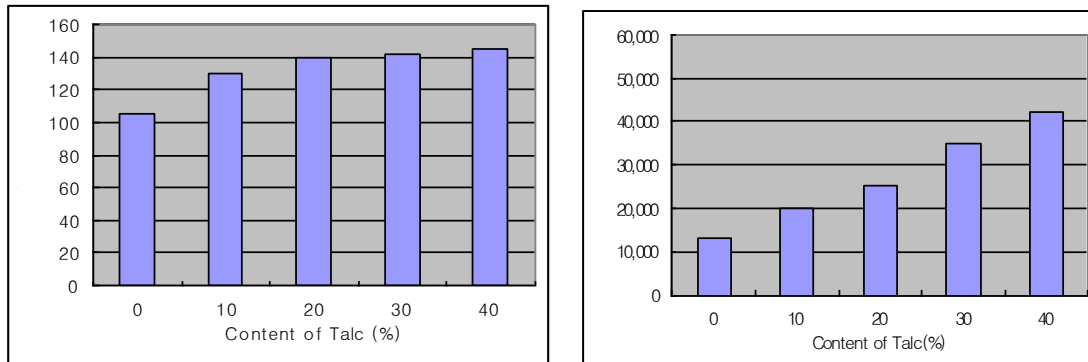


Fig 1. the effect on heat resistance and stiffness of contents of talc

● Applications

▶ Electric/electronic products

- Dish washer and microwave oven parts such as doors, air covers, air ducts;
- Washing machines parts (such as balances), and TV speaker cabinets;
- Household goods such as food containers.

● Physical Properties

Properties	Test Method	Condition	Units	TB51	TB52
Melt Index	ASTM D1238	230℃, 2.16kg	g/10min	11.0	11.0
Density	ASTM D1505	-	g/cm ³	0.97	1.07
Tensile Strength at Yield	ASTM D638	50mm/min	kg/cm ²	350	350
Elongation at Break	ASTM D638		%	60	60
Flexural Modulus	ASTM D790	5mm/min	kg/cm ²	20,000	25,000
Izod Impact Strength	ASTM D256	23℃	kg.cm/cm	5.5	5.0
Rockwell Hardness	ASTM D785	Rockwell	R-Scale	95	93
Heat Deflection Temp.	ASTM D648	4.6kg/cm ²	℃	130	139
Shrinkage Ratio	SAMSUNG TOTAL	2mmt	%	1.2~1.6	1.0~1.4
Flammability	UL94	-	-		HB

* 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 Samsung Total TB51, TB52, TB53, TB54 to the food packaging
- ▶ Thus, the verification on the suitability is necessary. In case you might need additional information, please contact Samsung 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.

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