

**HAG5223**

HAG5223 is 20%GF ABS resin with heat resistance. HAG5223 is mainly used in axial and centrifuge inertia fan blades of air-condition, automobile parts, camera equipment, etc.

Properties	Standard	Unit	Condition	Typical Value
<b>Physical</b>				
Density	ASTM D792	g/cm <sup>3</sup>		1.2
Melt Index	ASTM D1238	g/10min	220℃×10kg	7
Mold Shrinkage	ASTM D955	%		0.1~0.3
<b>Mechanical</b>				
Tensile Strength	ASTM D638	MPa		90
Tensile Elongation at Break	ASTM D638	%		6
Flexural Strength	ASTM D790	MPa		110
Flexural Modulus	ASTM D790	MPa		5200
Notched Izod Impact, 3.2mm	ASTM D256	J/m	3.2mm, Notched	100
<b>Thermal</b>				
Heat Deflection Temp. 1.82MPa Unannealed	ASTM D648	℃	1.82MPa	110
VICAT	ASTM D1525	℃	B	120
<b>Flammability</b>				
Flammability	UL-94	Class	—	HB
<b>Electrical Properties</b>				
Volume Resistivity	IEC 60093	Ohm-cm	/	> 1.0E+14
Surface Resistivity	IEC 60093	Ohm	/	> 1.0E+14

**Note:** 1) These are typical property values, not specifications.

2) In case of colored products, the values could vary slightly by color.

3) Values are measured at 23℃ and in RH of 50% on injection molded specimens.

4) UL File No. E65424(CSA File No. LS 66457), E254819.

**Disclaimer:**

"To the extent the user is entitled to disclose and distribute this document, the user may forward, distribute, and/or photocopy this copyrighted document only if unaltered and complete, including all of its headers, footers, disclaimers, and other information. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the data compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, suitability, accuracy, reliability, or completeness of this information or the products, materials, or process described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. You may not copy this document to a Web site.

Kumho-Sunny expressly disclaim liability for any loss, damage, or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. There is no endorsement of any product or process, and we expressly disclaim any contrary implication."

**For more information please click:**[www.kumhosunny.com](http://www.kumhosunny.com)

**HAG5223**

<b>Processing Parameters</b>	<b>Typical Value</b>	<b>Unit</b>
<b>Drying Temperature</b>	80~90	℃
<b>Drying Time</b>	3~4	hour
<b>Maximum moisture content</b>	0.05	%
<b>Barrel Temperature</b>		
<b>Rear</b>	210~230	℃
<b>Middle</b>	220~240	℃
<b>Front</b>	220~240	℃
<b>Nozzle</b>	220~240	℃
<b>Melt Temperature</b>	200~230	℃
<b>Mold Temperature</b>	50~80	℃
<b>Back Pressure</b>	1~5	MPa
<b>Screw Speed</b>	30~60	rpm

**Note:**

1)The above data is only for reference. Exact settings have to follow the product,injection machine and mold.

**Disclaimer:**

To the extent the user is entitled to disclose and distribute this document, the user may forward, distribute, and/or photocopy this copyrighted document only if unaltered and complete, including all of its headers, footers, disclaimers, and other information. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the data compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, suitability, accuracy, reliability, or completeness of this information or the products, materials, or process described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. You may not copy this document to a Web site.

Kumho-Sunny expressly disclaim liability for any loss, damage, or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. There is no endorsement of any product or process, and we expressly disclaim any contrary implication.

**For more information please click:[www.kumhosunny.com](http://www.kumhosunny.com)**