

# Technical Data Sheet

## Product Description

### FM ABS03

ABS03 is a general purpose ABS resin with semi heat resistance grade. Application includes mirror housings, hair dryer shells, electric oven exterior parts and automobile parts.

<i>Characteristic</i>	<i>Typical Value</i>	<i>Unit</i>	<i>ABS-30 specification</i>	<i>Test Method (ASTM)</i>	<i>Test Condition</i>
<i>Izod impact</i>	20	Kj/m <sup>2</sup>	Min 16	D-256	6.4 mm, notched
<i>Melt flow index</i>	1.2 10	gr/10 min	0.9-1.5 6-14	D-1238	200°C, 5 kg 220°C, 10 kg
<i>Rock well hardness</i>	108	R-scale	100-120	D-785	-
<i>HDT</i>	93	°C	Min 91	D-648	1.82 m pa
<i>Vicat softening temp</i>	103	°C	Min 100	D-1525	5kg/50°C
<i>Tensile strength</i>	460	Kg/cm <sup>2</sup>	Min 440	D-638	23°C, 50 mm/min
<i>Tensile elongation</i>	25	%	Min 16	D-638	23°C, 50 mm/min
<i>Flexural strength</i>	650	Kg/cm <sup>2</sup>	Min 630	D-790	23°C, 2.8 mm/min
<i>Flexural modulus</i>	21000	Kg/cm <sup>2</sup>	Min 18000	D-790	23°C, 2.8 mm/min
<i>Specific gravity</i>	1.04	-	1.04	D-792	23°C
<i>Molding shrinkage</i>	0.4-0.7	%	0.4-0.7	D-955	-
<i>Flammability</i>	HB	-	HB	UI94	1/8inch (3.2mm)

Notes: Values shown are averages and are not to be considered as product specification. These values may shift slightly as additional data is accumulated. - ISO test methods are the latest under the society's current procedures.

## Health & Safety

Ensure proper ventilation of the work environment to minimize health and safety hazards from fine particles. Ensure machinery and equipment is properly grounded to prevent sparks that can ignite dust. Molten polymers will cause thermal injuries to organic matter please ensure safety glasses and appropriate safety apparel is worn.

## Typical ABS processing conditions

Drying: it is recommended that FM Plastics ABS Resins be dried at (80-90°C) for 3 hours. A moisture level of  $\leq 0.1\%$  should be reached before injection molding the resin. The following molding conditions are recommended starting point for ABS Resin. Some modifications may be required depending on the specific molding equipment and part configuration.

### Injection Moldin

<i>Rear Temp (°C)</i>	200-210	<i>Nozzle Temp (°C)</i>	230-240
<i>Center Temp (°C)</i>	210-220	<i>Melt Temp (°C)</i>	250
<i>Center Temp (°C)</i>	210-220	<i>Mold Temp (°C)</i>	60-70
<i>Front Temp (°C)</i>	220-230	<i>Filling Speed</i>	Slow-med

## Packaging

ABS resins are supplied in pellet form packed in 25kg bags on 1.375 kg pallets or in 1.100 kg big bags.



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