



Material Datasheet 1

Trade Name : Zincolac ABS9879R	
Material : Acrylonitrile Butadiene Styrene (ABS)	
Color : All colors	
Mixed Recycle : All colors	

Properties	Test Method	Test Condition	Unit	Typical Value
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Physical

Specific Gravity	ASTM D792	23°C	g/cm ³	1.02 - 1.05
Mold Shrinkage	ASTM D995	3.2mm	%	0.3 - 0.6
Material Impurities	FTIR Spectroscopy		%	Below 2
Water Absorption	ASTM D570	23°C	%	1

Rheological

Melt Flow Index	ASTM D1238	220°C - 5kg	g/10min	18 - 22
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Mechanical

Tensile Strength	ASTM D638	23°C	MPa	48 - 52
Tensile Strength	ASTM D638	-40°C	MPa	58 - 62
Elongation at Yield	ASTM D638	23°C	%	2.4 - 2.8
Flexural Modulus	ASTM D790B	23°C	MPa	2500 - 2600
Izod Impact	ASTM D256	V-notched, 1/8"	kg.cm/cm	15 - 18
Izod Impact (-30°C)	ASTM D256	V-notched, 1/8"	kg.cm/cm	6 - 8

Thermal

Heat Distortion Temp.	ASTM D648	Unannealed	°C	86 - 90
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Contact Angle Measurement

Surface Energy (Total)	ASTM D1331	23°C	mN/m	42.8
Disperse Parts	ASTM D1331	23°C	mN/m	2.0
Polar Part	ASTM D1331	23°C	mN/m	40

Recommended Injection Molding Parameters

Barrel Temperature	Value	Mold Temperature	Value
Zone 1	180 - 200°C	Fixed Half	40 - 60°C
Zone 2	200 - 220°C	Moving Half	40 - 60°C
Zone 3	200 - 220°C	Drying Hour	3 - 4
Zone 4	210 - 230°C	Drying Temperature	80 - 90°C
Nozzle	190 - 210°C	Melt Temperature	190 - 240°C

The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. For further information, please contact or fax to Zinco Colours Technical Services Department.



ABS Source

Our ABS sources are mainly from industrial waste in Japan, which are cleaner, more reliable and consistent.

Some rejected product samples were collected directly from the factory.

Raw Materials



Finished Products

Water Heater Case



Remote Control



Air-cond Case



Toy Parts



ABS Piping



ABS Phone Case

