



## ColorFast® NYA1000

**PRODUCT DESCRIPTION** Nylon/ABS alloy with high ductility and excellent chemical resistance

**MATERIAL STATUS** Commercial: Active

**AVAILABILITY** Africa & Middle East, Asia Pacific, Europe, Latin America, North America

**FEATURES** Excellent Colorability

**USES** Consumer Applications, Household Goods, Industrial Applications

**FORMS** Pellets

**PROCESSING METHOD** Injection Molding

PHYSICAL	NOMINAL VALUE	UNIT	TEST METHOD
Density / Specific Gravity	1.07	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/3.8 kg)	6.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.18 mm)	0.80 to 1.0	%	ASTM D955
Water Absorption (24 hr)	1.1	%	ASTM D570
MECHANICAL	NOMINAL VALUE	UNIT	TEST METHOD
Tensile Strength <sup>2</sup> (Yield)	41.4	MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	280	%	ASTM D638
Flexural Modulus <sup>2</sup>	1170	MPa	ASTM D790
Flexural Strength <sup>2</sup>	57.2	MPa	ASTM D790
IMPACT	NOMINAL VALUE	UNIT	TEST METHOD
Notched Izod Impact (23°C)	690	J/m	ASTM D256
HARDNESS	NOMINAL VALUE	UNIT	TEST METHOD
Rockwell Hardness (R-Scale)	90		ASTM D785
THERMAL	NOMINAL VALUE	UNIT	TEST METHOD
Deflection Temperature Under Load 1.8 MPa, Unannealed, 6.35 mm	70.0	°C	ASTM D648
INJECTION	NOMINAL VALUE	UNIT	TEST METHOD
Drying Temperature	85	°C	
Drying Time	3.0 to 4.0	hr	
Drying Time, Maximum	8.0	hr	
Suggested Shot Size	40 to 60	%	
Rear Temperature	204 to 238	°C	



<b>INJECTION</b>	<b>NOMINAL VALUE</b>	<b>UNIT</b>
Middle Temperature	210 to 232	°C
Front Temperature	221 to 254	°C
Nozzle Temperature	216 to 249	°C
Processing (Melt) Temp	221 to 254	°C
Mold Temperature	10 to 71	°C
Back Pressure	0.345 to 0.689	MPa
Screw Speed	40 to 70	rpm
Vent Depth	0.025 to 0.076	mm

**NOTES**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 51 mm/min

