

## Product Information

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### XT® polymer X800RG acrylic-based multipolymer compound

#### Product Profile:

XT polymer X800RG compound is an impact-modified acrylic-based multipolymer for molding and extrusion applications.

Typical properties of XT® polymer acrylic-based multipolymer compounds are:

- outstanding thermoformability
- superior heat distortion temperatures
- excellent bonding and welding capabilities
- good impact strength
- good light transmission
- resistant to EtO, gamma and E-beam sterilization
- resistant to PVC stabilizers

The special properties of XT polymer X800RG compound are:

- high melt flow rate
- good chemical resistance

#### Application:

Used for food packaging and appliance parts.

#### Examples:

Paper towel dispensers, soap dispensers, sporting goods, battery cases and musical instrument casings.

#### Processing:

XT polymer X800RG compound can be processed in injection molding machines and extrusion lines with 3- zone general purpose screws.

#### Packaging:

Available in 1500 lb. gaylord boxes; other packaging available on request.

#### Regulatory and compliance requirements:

Meets requirements of the United States Pharmacopeia Class VI 301 tint only; FDA for food contact for all use conditions up to and including hot filled or pasteurized above 150 degrees F (e.g. Condition 21 CFR 176.170) for all food types except those containing more than 8% alcohol.

**Properties:**

	Parameter	Unit	ASTM-Standard	XT® polymer X800RG compound
<b>Mechanical Properties</b>				Typical Value
Tensile Strength		psi [MPa]	D 638	6300 [43.4]
Tensile Modulus		x10 <sup>6</sup> psi [GPa]	D 638	0.43 [3.0]
Tensile Elongation @ Yield		%	D 638	4
Tensile Elongation @ Break		%	D 638	6
Flexural Strength		psi [MPa]	D 790	9700 [66.9]
Flexural Modulus		x10 <sup>6</sup> psi [GPa]	D 790	0.32 [2.2]
Notched Izod	¼" bar @23°C	ft-lb/in [J/m]	D 256	1.9 [101.1]
Notched Izod	¼" bar @0°C	ft-lb/in [J/m]	D 256	1.2 [64]
Rockwell Hardness		M Scale	D 785	22
<b>Thermal Properties</b>				
Vicat Softening Point		°F [°C]	D 1525	201 [94]
Deflection Temperature, Annealed	1.8MPa, 0.250"	°F [°C]	D 648	186 [86]
Coeff. of Linear Therm. Expansion	32 – 312°F	in/ in/°F	D 696	0.000048
Coeff. of Linear Therm. Expansion	0 – 100°C	mm/mm/°C	D 696	0.000086
<b>Rheological Properties</b>				
Melt Flow Rate	230°C & 5.0 kg	g/10min	D 1238	11
<b>Optical Properties</b>				d = 3.2 mm
Light Transmission		%	D 1003	86
Haze		%	D 1003	5
Yellowness Index			Cyro TM	-1.0
<b>Other Properties</b>				
Specific Gravity			D 792	1.11
Water Absorption		% Max	D 570	0.3
Mold Shrinkage		in/in, mm/mm	D 955	0.004 – 0.007
Bulk Density		g/cc	D 1895	0.65
<b>Recommended processing conditions</b>				
Predrying Temperature		°F [°C]		180 [82]
Predrying Time		hour		3 – 4
Melt Temperature		°F [°C]		425 – 475 [218 – 246]
Mold Temperature		°F [°C]		120 – 170 [49 – 77]

All listed technical data are typical values intended for your guidance. They are given without obligation and do not constitute a materials specification.

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