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## PRODUCT INFORMATION

# XT® POLYMER 250 acrylic-based copolymer compound

### Product Profile:

XT® POLYMER 250 compound is an impact-modified acrylic-based copolymer for molding, extrusion and blow molding applications.

Typical properties of XT® POLYMER acrylic-based copolymer 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 plasticizers

The special properties of XT® POLYMER 250 compound are:

- high strength properties
- good chemical resistance

### Application:

Used for medical devices, food packaging, pharmaceutical packaging, rigid medical device packaging and appliance parts.

### Examples:

IV accessories, paper towel dispensers, soap dispensers, sporting goods, battery cases and musical instrument casings.

### Processing:

XT® POLYMER 250 compound can be processed in injection molding machines and extrusion lines with 3-zone general purpose screws.

### Physical Form / Packaging:

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

**Properties:**

	Parameter	Unit	ASTM-Standard	XT® POLYMER 250 acrylic- based copolymer compound
<b>Mechanical Properties</b>				<b>Typical Value</b>
Tensile Strength		psi [MPa]	D 638	8000 [55.2]
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	13000 [89.6]
Flexural Modulus		x10 <sup>6</sup> psi [GPa]	D 790	0.40 [2.8]
Notched Izod	¼" bar @23°C	ft-lb/in [J/m]	D 256	1.2 [64]
Notched Izod	¼" bar @23°C	ft-lb/in [J/m]	D 256	0.9 [48]
Rockwell Hardness		1	D 785	56
<b>Thermal Properties</b>				
Vicat Softening Point	50N, 50°C/h	°F [°C]	D 1525	214 [101]
Deflection Temperature, Annealed	1.8MPa, 0.250"	°F [°C]	D 648	189 [87]
Coeff. of Linear Therm. Expansion	32 - 312°F	1/F	D 696	0.00004
Coeff. of Linear Therm. Expansion	0 - 100°C	1/C	D 696	0.000072
<b>Rheological Properties</b>				
Melt Flow Rate	230°C & 5.0 kg	g/10min	D 1238	4.2
<b>Optical Properties</b>				d = 3.2 mm
Light Transmission		%	D 1003	90
Haze		%	D 1003	2.5
Yellowness Index			E 313	4
<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		in/in, mm/mm	D 1895	0.65
<b>Recommended Processing Conditions</b>				
Predrying Temperature		F [°C]		180 [82]
Predrying Time in Desiccant-Type Drier		h		3 – 4
Melt Temperature		F [°C]		400 - 475 [204 - 246]
Mold Temperature (Injection Molding)		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.

Certified to ISO 9001:2015, ISO 14001:2015 and IATF 16949:2016.

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Ref. No.: MC187 A1142

The logo for RÖHM, featuring the word "RÖHM" in a bold, black, sans-serif font. The letter "O" is replaced by a stylized "Ö" with two dots above it.