



TRADITIONALLY
INNOVATIVE

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.

Regulatory and compliance requirements:

Meets requirements of the United States Pharmacopeia Class VI in colorless (000) only; ISO 10993-1 in colorless (000) only and 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 250 acrylic- based copolymer compound
Mechanical Properties				Typical Value
Tensile Strength		psi [MPa]	D 638	8000 [55.2]
Tensile Modulus		x10 ⁶ 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 ⁶ 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 @0°C	ft-lb/in [J/m]	D 256	0.9 [48]
Rockwell Hardness		M Scale	D 785	56
Thermal Properties				
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
Rheological Properties				
Melt Flow Rate	230°C & 5.0 kg	g/10min	D 1238	4.2
Optical Properties				
	d = 3.2 mm			
Light Transmission		%	D 1003	90
Haze		%	D 1003	2.5
Yellowness Index			E 313	4
Other Properties				
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

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.

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

ACRYLITE, ACRYMID, CYROLITE, CYREX, CYRO, Vu-Stat and XT polymer are registered trademarks of Roehm America LLC. Roehm is a worldwide manufacturer of PMMA products sold under the ACRYLITE® trademark in the Americas and under the PLEXIGLAS® trademark in the European, Asian, African and Australian continents. ©2017 Roehm America LLC. All rights reserved

Roehm America LLC • 8 Campus Drive • Parsippany NJ 07054 • USA
www.cyrolite.com
www.roehm.com

Ref. No.: MC187 A1142

The logo for RÖHM, featuring the word "RÖHM" in a bold, black, sans-serif font. The letter "O" has two dots above it, indicating it is a German umlaut.