

Product Texts

Productprofil:

XT polymer 375 compound is an impact-modified acrylic-based multipolymer for molding, extrusion and blow molding 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 375 compound are:

- excellent chemical resistance
- high impact strength

Application:

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

Example:

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

Processing:

XT polymer 375 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.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	1.54	cm ³ /10min	ISO 1133
Temperature	230	°C	-
Load	3.8	kg	-
^[C] Density of melt	1010	kg/m ³	-
^[C] Ejection temperature	76	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2600	MPa	ISO 527
^[C] Yield stress	56	MPa	ISO 527
^[C] Yield strain	3.1	%	ISO 527
^[C] Nominal strain at break	12	%	ISO 527
^[C] Charpy impact strength, +23°C	84	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	70	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	10	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	95	°C	ISO 75-1/-2

XT® polymer 375

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Röhm GmbH

[C] Temp. of deflection under load, 0.45 MPa	97	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	95.6	°C	ISO 306

[C]: CAMPUS

Optical properties	Value	Unit	Test Standard
ISO Data			
[C] Luminous transmittance	85	%	ISO 13468-1, -2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	1120	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	3 - 4	h	-
Melt temperature	205 - 245	°C	-
Mold temperature	50 - 80	°C	-

Characteristics**Processing**

Injection Molding, Sheet Extrusion, Blow Molding, Thermoforming

Delivery form

Pellets

Special Characteristics

High impact or impact modified, Transparent, Sterilizable, Ethylene Oxide (EtO) Sterilization, Gamma irradiation sterilization, Electron beam (e-beam) sterilization

Features

Good Adhesion, Weldable

Chemical Resistance

General Chemical Resistance

Certifications

Food contact

Applications

Medical, Packaging, Sports Equipment

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information**Injection molding**

PREPROCESSING

Predrying temperature: max. 80 °C

Predrying time: 3 - 4 h

PROCESSING

Melt temperature: 205 - 245°C

Mold temperature: 50 - 80°C

Sheet extrusion

PREPROCESSING

Predrying temperature: max. 80 °C

Predrying time: 3 - 4 h

PROCESSING

Melt temperature: 205 - 245 °C

Die temperature: 205 - 245 °C