PLEXIGLAS® Heatresist FT15

PMMA Röhm GmbH

Product Texts

Productprofil:

PLEXIGLAS® Heatresist FT15 is a special acrylic-based polymer.

With regard to its

- good weather resistance and
- high light transmission,

PLEXIGLAS® Heatresist FT15 shows comparable properties to those of PLEXIGLAS® standard molding compounds. In addition, PLEXIGLAS® Heatresist FT15 offers the special benefit of a

- high heat deflection temperature combined with good flow.

Application:

PLEXIGLAS® Heatresist FT15 is particularly suitable for injection moldings.

Example:

luminaire covers, automotive lights and technical moldings exposed to high temperatures.

Processing:

PLEXIGLAS® Heatresist FT15 can be processed on injection-molding machines with 3-zone general purpose screws for engineering thermoplastics. Good pre-desiccation must be pointed out.

Physical Form / Packaging:

PLEXIGLAS® Heatresist FT15 is supplied as pellets of uniform size, packaged in 25kg, two-ply polyethylene bags; other packaging on request.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**4.5**	cm³/10min	ISO 1133
Temperature	**230**	°C	-
Load	**3.8**	kg	-
[C] Density of melt	**1110**	kg/m³	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**3500**	MPa	ISO 527
[C] Stress at break	**50**	MPa	ISO 527
[C] Strain at break	**3.1**	%	ISO 527
[C] Charpy impact strength, +23°C	**18**	kJ/m²	ISO 179/1eU

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Glass transition temperature, 10°C/min	**121**	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**105**	°C	ISO 75-1/-2

[C] Temp. of deflection under load, 0.45 MPa	**107**	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**115**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**66**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.6**	mm	-
Yellow Card available	**yes**	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1

[C]: CAMPUS

Optical properties	Value	Unit	Test Standard
ISO Data			
[C] Luminous transmittance	**91**	%	ISO 13468-1, -2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1190**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**230**	°C	ISO 294
Injection Molding, mold temperature	**70**	°C	ISO 294
Injection Molding, injection velocity	**195**	mm/s	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**100**	°C	-
Pre-drying - Time	**4 - 6**	h	-
Melt temperature	**220 - 250**	°C	-
Mold temperature	**60 - 90**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Pellets

Special Characteristics
Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat, Transparent

Applications
Automotive

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

Other text information

Injection molding
PREPROCESSING
Predrying temperature: max. 100 °C
Predrying time in a desiccant-type drier: 4 - 6 h
PROCESSING
Melt temperature: 220 - 250°C
Mold temperature:60 - 90°C