PLEXIGLAS® Softlight zk6BR df22

PMMA — Röhm GmbH

Product Texts

Productprofil:

PLEXIGLAS® Softlight zk6BR df22, based on PLEXIGLAS® Resist zk6BR, is an impact modified molding compound characterized by diffuse scattering of light.

Typical properties of impact modified PLEXIGLAS® molding compound are

1. high break resistance and impact strength
2. improved resistance to stress cracking
3. good weather resistance
4. high surface hardness and mar resistance
5. the pleasant feel and sound of the moldings.

PLEXIGLAS® Softlight zk6BR df22 is characterized by the following special properties:

1. very good lightdiffusion combined with excellent light transmission
2. matte surfaces can be obtained by varying the extrusion parameters.

Application:

Used for extruding profiles and sheets, but also for injection molding items for lighting engineering applications

Example:

applications that call for light diffusion combined with optimum transmission

Processing:

PLEXIGLAS® Softlight zk6BR df22 can be processed on extruders with 3-zone general purpose screws for engineering thermoplastics. The matte finish of profile surfaces depends very much on machine design (calibrating unit, polishing rolls) and cooling conditions. It can be enhanced by controlled temperature reduction.

Physical Form / Packaging:

PLEXIGLAS® Softlight df molding compounds are supplied as pellets of uniform size, packaged in 25kg polyethylene bags; other packaging on request.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**1.4**	cm³/10min	ISO 1133
Temperature	**230**	°C	-
Load	**3.8**	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**1800**	MPa	ISO 527
[C] Yield stress	**45**	MPa	ISO 527
[C] Yield strain	**5**	%	ISO 527
[C] Nominal strain at break	**40**	%	ISO 527
[C] Charpy impact strength, +23°C	**54**	kJ/m²	ISO 179/1eU

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Glass transition temperature, 10°C/min	**109**	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**93**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**99**	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**98**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**90**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**1E13**	Ohm	IEC 62631-3-2

[C]: CAMPUS

Optical properties	Value	Unit	Test Standard
ISO Data			
[C] Luminous transmittance	**86**	%	ISO 13468-1, -2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1150**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**255**	°C	ISO 294
Injection Molding, mold temperature	**58**	°C	ISO 294
Injection Molding, injection velocity	**195**	mm/s	ISO 294

[C]: CAMPUS

Characteristics

Processing
Injection Molding, Profile Extrusion, Sheet Extrusion, Other Extrusion

Delivery form
Pellets

Additives
Release agent

Special Characteristics
High impact or impact modified, Light stabilized or stable to light, U.V. stabilized or stable to weather

Features
Light Diffusing

Chemical Resistance
Environmental Stress Crack Resistance

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 in a desiccant-type drier: 2 - 3 h
PROCESSING
Melt temperature: 220 - 260°C
Mold temperature:60 - 90°C

Profile extrusion

PREPROCESSING
Predrying temperature: max. 80 °C
Predrying time in a desiccant-type drier: 2 - 3 h
PROCESSING
Melt temperature: 230 - 260 °C

Die temperature: 230 - 260 °C

Sheet extrusion

PREPROCESSING
Predrying temperature: max. 80 °C
Predrying time in a desiccant-type drier: 2 - 3 h
PROCESSING
Melt temperature: 230 - 260 °C
Die temperature: 230 - 260 °C