Product Texts

Productprofil:

PLEXIGLAS® Resist zk4HC is an amorphous, impact-modified thermoplastic molding compound (PMMA-I).

Typical properties of impact-modified PLEXIGLAS® molding compounds are

- high weather resistance
- excellent transmission and clarity
- brilliant appearance
- the pleasant feel and sound of the moldings.

PLEXIGLAS® Resist zk4HC is characterized by the following special properties:

- improved break resistance and impact strength
- best resistance to stress cracking of all impact-modified PLEXIGLAS molding compounds
- AMECA listing.

Application:

Used for extruding and coextruding sheets and profiles.

Example:

extruded/coextruded sheets and profiles for automotive bodies and the sanitaryware sector (bathtubs and shower trays) or crystal-clear luminare covers for industrial plants that come into contact with aggressive media.

Processing:

PLEXIGLAS® Resist zk4HC can be processed on machines with 3-zone general purpose screws for engineering thermoplastics.

Physical Form / Packaging:

PLEXIGLAS® Resist zk molding compounds are supplied as pellets of uniform size in 25kg polyethylene bags or in 500kg boxes with PE lining; other packaging on request.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**1.1**	cm³/10min	ISO 1133
Temperature	**230**	°C	-
Load	**3.8**	kg	-
[C] Density of melt	**1040**	kg/m³	-
[C] Thermal conductivity of melt	**0.19**	W/(m K)	-
[C] Spec. heat capacity of melt	**2440**	J/(kg K)	-
[C] Eff. thermal diffusivity	**7.49E-8**	m²/s	-
[C] Ejection temperature	**85**	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2900**	MPa	ISO 527
[C] Yield stress	**68**	MPa	ISO 527
[C] Yield strain	**4.5**	%	ISO 527
[C] Nominal strain at break	**17**	%	ISO 527

[C] Charpy impact strength, +23°C	**25**	kJ/m²	ISO 179/1eU

[C]: CAMPUS

Thermal properties	**Value**	**Unit**	**Test Standard**
ISO Data			
[C] Glass transition temperature, 10°C/min	**108**	°C	ISO 11357-1/-2
[C] Vicat softening temperature, B	**102**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**80**	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] Oxygen index	**17.5**	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	**Value**	**Unit**	**Test Standard**
ISO Data			
[C] Relative permittivity, 100Hz	**3.7**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**2.9**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**500**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**300**	E-4	IEC 62631-2-1
[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	**92**	%	ISO 13468-1, -2

[C]: CAMPUS

Other properties	**Value**	**Unit**	**Test Standard**
[C] Water absorption	**2**	%	Sim. to ISO 62
[C] Humidity absorption	**0.6**	%	Sim. to ISO 62
[C] Density	**1180**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	**Value**	**Unit**	**Test Standard**
ISO Data			
[C] Injection Molding, melt temperature	**250**	°C	ISO 294
Injection Molding, mold temperature	**62**	°C	ISO 294
Injection Molding, injection velocity	**195**	mm/s	ISO 294

[C]: CAMPUS

Characteristics

Processing
Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion

Delivery form
Pellets

Additives
Release agent

Features
Amorphous

Chemical Resistance
Environmental Stress Crack Resistance

Applications
Automotive

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

Special Characteristics

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

Other text information

Profile extrusion

PREPROCESSING
Predrying temperature: max. 95 °C
Predrying time in a desiccant-type drier: 2 - 3 h
PROCESSING
Melt temperature: 220 - 260 °C
Die temperature: 220 - 260 °C

Sheet extrusion

PREPROCESSING
Predrying temperature: max. 95 °C
Predrying time in a desiccant-type drier: 2 - 3 h
PROCESSING
Melt temperature: 220 - 260 °C
Die temperature: 220 - 260 °C