

PLEXIGLAS® Resist zk5HC

Product Profile:

PLEXIGLAS® Resist zk5HC 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 zk5HC is characterized by the following special properties:

- high break resistance and impact strength
- best resistance to stress cracking of all impact-modified PLEXIGLAS® molding compounds.

Application:

Used for extruding and coextruding sheets and profiles.

Examples:

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

Processing:

PLEXIGLAS® Resist zk5HC molding compound 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.

For more information:

For more information, e.g. Charts or lists of resistance are in the database CAMPUS® (<http://www.campusplastics.com>) free of charge.

Properties:

	Parameter	Unit	Standard	PLEXIGLAS® Resist zk5HC
Mechanical Properties				
Tensile Modulus	1 mm/min	MPa	ISO 527	2500
Yield Stress	50 mm/min	MPa	ISO 527	63
Yield Strain	50 mm/min	%	ISO 527	5
Nominal Strain @ Break		%	ISO 527	28
Charpy Impact Strength	23°C	kJ/m ²	ISO 179/1eU	55
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	100
Glass Transition Temperature		°C	ISO 11357	108
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	*
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	*
Coeff. of Linear Therm. Expansion	0 - 50°C	E-5 /°K	ISO 11359	9
Classes of construction product			DIN EN 13501-1	E
Flammability UL 94	1.5 mm	Class	IEC 60695-11-10	HB
Rheological Properties				
Melt Volume Rate, MVR	230°C / 3.8kg	cm ³ /10min	ISO 1133	0.7
Optical Properties				
Luminous transmittance	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	92
Refractive Index	589nm/23°C		ISO 489	1.49
Other Properties				
Density		g/cm ³	ISO 1183	1.17
Water Absorption in Water	saturation, 23°C	%	ISO 62	1.9
Humidity Absorption	23°C / 50%	%	ISO 62	0.5
Recommended Processing Conditions				
Predrying Temperature		°C		max. 90
Predrying Time in Desiccant-Type Drier		h		2 - 3
Melt Temperature		°C		220 - 260
Mold Temperature (Injection Molding)		°C		50 - 70

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.

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Röhm GmbH • Dolivostraße 17 • 64293 Darmstadt
plexiglas.polymers@roehm.com
www.plexiglas-polymers.de
www.roehm.com

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