

PLEXIGLAS® Resist zk6HF

Product Profile:

PLEXIGLAS® Resist zk6HF 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 zk6HF is characterized by the following special properties:

- excellent break resistance and impact strength
- improved resistance to stress cracking
- very good flow.

Application:

Used for injection molding as well as for extruding sheets and profiles.

Examples:

applications involving thin walls and long flow paths, thin-walled components; items requiring accurate mold surface reproduction, such as very finely textured luminaire covers.

Processing:

PLEXIGLAS® Resist zk6HF can be processed on machines with 3-zone general purpose screws for engineering thermoplastics.

Physical Form / Packaging:

PLEXIGLAS® Resist zk HF molding compounds are supplied as pellets of uniform size in 25 kg polyethylene bags or in 500 kg 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 zk6HF
Mechanical Properties				
Tensile Modulus	1 mm/min	MPa	ISO 527	1900
Yield Stress	50 mm/min	MPa	ISO 527	45
Yield Strain	50 mm/min	%	ISO 527	5
Nominal Strain @ Break		%	ISO 527	50
Charpy Impact Strength	23°C	kJ/m ²	ISO 179/1eU	75
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	94
Coeff. of Linear Therm. Expansion	0 – 50°C	E-5 /°K	ISO 11359	11
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	4.2
Optical Properties				
Luminous transmittance	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	91
Refractive Index	589nm/23°C		ISO 489	1.49
Other Properties				
Density		g/cm ³	ISO 1183	1.16
Water Absorption in Water	saturation, 23°C	%	ISO 62	1.8
Humidity Absorption	23°C / 50%	%	ISO 62	0.5
Recommended Processing Conditions				
Predrying Temperature		°C		max. 80
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.

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Evonik is a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

® = registered trademark

PLEXIGLAS and PLEXIMID are registered trademarks of Evonik Röhm GmbH.

CAMPUS is a registered trademark of Chemie Wirtschaftsförderungs-GmbH, Frankfurt / M.

Evonik Performance Materials GmbH Kirschenallee 64293 Darmstadt
plexiglas.polymers@evonik.com
www.plexiglas-polymers.com

Ref. No.: MC119-E a1142 Date: 2018-03-28