

## PRODUCT INFORMATION

# PLEXIGLAS® Resist AG 100

### Product Profile:

PLEXIGLAS® Resist AG 100 is an amorphous thermoplastic molding compound, based on impact-modified polymethyl methacrylate (PMMA).

PLEXIGLAS® molding compounds have the following typical properties:

- high weather resistance
- excellent transmission and clarity
- brilliant appearance
- low weight
- 100% recyclable
- pleasant feel and sound of molded parts

PLEXIGLAS® Resist AG 100 is characterized by the following additional properties:

- highest breaking strength and impact strength
- improved resistance to stress cracking
- balanced property profile
- clear reduction of reversible haze at very high and low temperatures
- increased heat deflection temperature under load
- AMECA listing, CAMPUS and moldflow data available

### Application:

PLEXIGLAS® Resist AG 100 has a balanced property profile and is used for extruding and coextruding sheets and profiles as well as for injection molding.

### Examples:

Automotive frontend lighting covers, e.g. fog lamps, turning lights, signature and decorative lights, and other auxiliary lamps, emblems, cover for frontend sensor fields, special luminaires.

### Processing:

PLEXIGLAS® Resist AG 100 can be processed by injection molding of parts or by sheet extrusion and coextrusion. PLEXIGLAS® Resist AG 100 can be injection-molded on processing machines with a standard three-section screw for engineering thermoplastics in one-component or two-component processes.

### Physical Form / Packaging:

PLEXIGLAS® Resist molding compounds are supplied as pellets of uniform size in 25kg polyethylene bags or 500kg boxes with PE lining. Other types of packaging are available 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 AG 100
<b>Mechanical Properties</b>				
Tensile Modulus	1 mm/min	MPa	ISO 527	2200
Yield Stress	50 mm/min	MPa	ISO 527	55
Yield Strain	50 mm/min	%	ISO 527	5
Nominal Strain @ Break		%	ISO 527	45
Charpy Impact Strength	23°C	kJ/m <sup>2</sup>	ISO 179/1eU	120
<b>Thermal Properties</b>				
Vicat Softening Temperature	B / 50	°C	ISO 306	105
Glass Transition Temperature		°C	ISO 11357	112
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	105
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	100
Coeff. of Linear Therm. Expansion	0 - 50°C	E-5 /°K	ISO 11359	11
Flammability UL 94	1.5 mm	Class	IEC 60695-11-10	HB
<b>Rheological Properties</b>				
Melt Volume Rate, MVR	230°C / 3.8kg	cm <sup>3</sup> /10min	ISO 1133	1.1
<b>Optical Properties</b>				
Luminous transmittance	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	91
Haze		%	ASTM D1003	0.7
Refractive Index	589nm/23°C		ISO 489	1.49
<b>Other Properties</b>				
Density		g/cm <sup>3</sup>	ISO 1183	1.16
Water Absorption in Water	saturation, 23°C	%	ISO 62	1.5
Humidity Absorption	23°C / 50%	%	ISO 62	0.5
<b>Recommended Processing Conditions</b>				
Predrying Temperature		°C		70 - 80
Predrying Time in Desiccant-Type Drier		h		3 - 4
Melt Temperature		°C		235 - 270
Mold Temperature (Injection Molding)		°C		60 - 80
Die Temperature (Extrusion)		°C		240

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 • Darmstadt • Germany  
plexiglas.polymers@roehm.com  
www.plexiglas-polymers.com  
www.roehm.com

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