

PRODUCT INFORMATION

ACRYLITE® Resist AG 100

Product Profile:

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

ACRYLITE® 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

ACRYLITE® 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:

ACRYLITE® 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:

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

Physical Form / Packaging:

ACRYLITE® 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	ACRYLITE® Resist AG 100
Mechanical Properties				
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 ²	ISO 179/1eU	120
Thermal Properties				
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
Rheological Properties				
Melt Volume Rate, MVR	230°C / 3,8kg	cm ³ /10min	ISO 1133	1,1
Optical Properties				
	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	91
Haze		%	ASTM D1003	0,7
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	1,5
Humidity Absorption	23°C / 50%	%	ISO 62	0,5
Recommended Processing Conditions				
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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