

Product Information

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ACRYLITE® hw55 acrylic polymer

Product Profile:

ACRYLITE® hw55 acrylic polymer is a copolymer based on methyl methacrylate (MMA) with comonomer constituents for injection molding applications.

Typical properties of ACRYLITE® acrylic polymers are:

- excellent weather resistance
- high light transmission
- high mechanical strength
- high surface hardness and mar resistance
- good melt flow rate
- versatile colorability due to crystal clarity

The special properties of ACRYLITE® hw55 polymer are:

- high heat resistance
- high melt strength
- improved resistance to isopropyl alcohol
- AMECA listed

Application:

Used for injection molding of technical parts for applications subjected to high thermal stress.

Examples:

Automotive rear light lenses, lighted keys, light covers, reflex lenses and fog light lenses.

Processing:

ACRYLITE® hw55 polymer can be processed in injection molding machines and extrusion lines with 3- zone general purpose screws. ACRYLITE® hw55 polymer exhibits heat sensitivity during processing therefore follow our recommended processing conditions.

Packaging:

Available in 1500 lb. gaylord boxes; other packaging available on request.

Properties:

	Parameter	Unit	Standard	ACRYLITE® hw55 polymer
Mechanical Properties				
Tensile Modulus	1 mm/min	MPa	ISO 527	3600
Stress @ Break	5 mm/min	MPa	ISO 527	80
Strain @ Break	5 mm/min	%	ISO 527	3.5
Charpy Impact Strength	23°C	kJ/m ²	ISO 179/1eU	20
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	119
Deflection Temperature Under Load	1.8 MPa	°C	ISO 75	106
Rheological Properties				
Melt Volume Rate, MVR	230°C & 3.8kg	cm ³ /10min	ISO 1133	1.2
Optical Properties				
Transmission Factor	d=3 mm	%	ISO 13468-2	91
Refractive Index			ISO 489	1.51
Other Properties				
Density		g/cm ³	ISO 1183	1.19
Recommended Processing Conditions				
Predrying Temperature		°C		max. 109
Predrying Time		h		3 – 4
Melt Temperature		°C		220 – 250
Mold Temperature		°C		60 – 90

All listed technical data are typical values intended for your guidance. They are given without obligation and do not constitute a materials specification.

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