

PRODUCT INFORMATION

ACRYLITE® Hi-Gloss NTA-1 impact acrylic polymer

Product Profile:

ACRYLITE® Hi-Gloss NTA-1 polymer is an opaque, amorphous, and impact-modified thermoplastic molding and extrusion compound based on polymethyl methacrylate.

Typical properties of ACRYLITE® Hi-Gloss acrylic polymers are:

- excellent weather resistance
- improved resistance to stress cracking
- good melt flow rate
- good polishability
- impact resistance

The special properties of ACRYLITE® Hi-Gloss NTA-1 polymer are:

- good heat resistance
- available in a range of opaque colors
- high melt strength
- increased impact/break resistance and strength

Application:

Used for injection molding technical parts.

Examples:

Automotive surface parts such as exterior pillars, mirror housings, pillar panels, spoiler, two-shot structural protection applications where acrylic is applied over other non-weatherable polymers, emblems and interior trim; housings for consumer products

Processing:

ACRYLITE® Hi-Gloss NTA-1 polymer can be processed in injection molding machines and extrusion lines with 3- zone general purpose screws.

Physical Form / Packaging:

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

Properties:

	Parameter	Unit	Standard	ACRYLITE® Hi-Gloss NTA-1 impact acrylic polymer
Mechanical Properties				
Tensile Modulus	1 mm/min	MPa	ISO 527	2700
Yield Stress	50 mm/min	MPa	ISO 527	68
Yield Strain	50 mm/min	%	ISO 527	5
Nominal Strain @ Break		%	ISO 527	10
Charpy Impact Strength	23°C	kJ/m ²	ISO 179/1eU	33
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	110
Glass Transition Temperature		°C	ISO 11357	120
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	103
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	102
Classes of construction product			DIN EN 13501-1	E
Glow Wire Ignition Temperature		°C	IEC 60695-2	675
Rheological Properties				
Melt Volume Rate, MVR	230°C & 3,8kg	cm ³ /10min	ISO 1133	3
Optical Properties				
	d=3 mm			
Other Properties				
Density		g/cm ³	ISO 1183	1.18
Water Absorption in Water	saturation, 23°C	%	ISO 62	> 3
Recommended Processing Conditions				
Predrying Temperature		°C		max. 100
Predrying Time in Desiccant-Type Drier		h		3 - 4
Melt Temperature		°C		220 - 250
Mold Temperature (Injection Molding)		°C		50 - 85

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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