

## PLEXIGLAS® Hi-Gloss NTA-1

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### Product Profile:

PLEXIGLAS® Hi-Gloss NTA-1 is an impact-modified compound with a high heat deflection temperature based on polymethyl methacrylate (PMMA).

Besides the well-known properties of PLEXIGLAS® molding compound, such as

- good flow
- high mar resistance
- good weather resistance
- good polishability,

PLEXIGLAS® Hi-Gloss NTA-1 offers the added benefits of

- increased impact strength
- good heat deflection temperature under load.

### Application:

PLEXIGLAS® Hi-Gloss NTA-1 is particularly suitable for injection molding technical components.

Owing to its superior brilliance, high-gloss (Class A) surfaces can be obtained in opaque colors.

### Examples:

add-on automotive body parts, mirror housings, pillar panels, spoilers

### Processing:

PLEXIGLAS® Hi-Gloss NTA-1 can be processed on machines with 3-zone general purpose screws for engineering thermoplastics.

### Physical Form / Packaging:

PLEXIGLAS® Hi-Gloss NTA-1 compounds are supplied as pellets of uniform size, packaged in 25kg polyethylene bags or in 500kg boxes with PE lining; other packaging on request.

## Properties:

	Parameter	Unit	Standard	PLEXIGLAS® Hi-Gloss NTA-1
<b>Mechanical Properties</b>				
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 <sup>2</sup>	ISO 179/1eU	33
<b>Thermal Properties</b>				
Vicat Softening Temperature	B / 50	°C	ISO 306	110
Glass Transition Temperature		°C	IEC 10006	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
Fire Rating			DIN 4102	B2
Glow Wire Ignition Temperature		°C	IEC 60695-2	675
<b>Rheological Properties</b>				
Melt Volume Rate, MVR	230°C / 3.8kg	cm <sup>3</sup> /10min	ISO 1133	3
<b>Other Properties</b>				
Density		g/cm <sup>3</sup>	ISO 1183	1.18
Water Absorption in Water		%	ISO 62	> 3
<b>Recommended Processing Conditions</b>				
Predrying Temperature		°C		max. 100
Predrying Time in Desiccant-Type Drier		h		2 - 3
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.

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The Business Unit Performance Polymers of Evonik is a worldwide manufacturer of PMMA molding compounds sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian Continent and under the trademark ACRYLITE® in the Americas.

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