

Product Information

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PLEXIGLAS® 8N CoolTouch™ black

Product Profile:

PLEXIGLAS® 8N CoolTouch™ black is an amorphous thermoplastic molding compound (PMMA).

Typical properties of PLEXIGLAS® molding compounds are:

- good flow
- high mechanical strength, surface hardness and abrasion resistance
- very good weather resistance

Special properties of PLEXIGLAS® 8N CoolTouch™ black are:

- heat-reflection (IR)
- high total solar reflection (TSR), reflects 13% of the solar energy
- reduces the heat build-up of plastic parts, thus increases the dimension stability.

Application:

PLEXIGLAS® 8N CoolTouch™ black is suitable for injection molding of technical components, as well as for extrusion/coextrusion.

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

Examples:

black automotive add-on parts like spoiler, pillar and roof trims,
black automotive parts like roof modules.

Processing:

PLEXIGLAS® 8N CoolTouch™ black can be processed on injection molding machines or extruders with for PMMA suitable 3-zone general purpose screws for engineering thermoplastics.

Physical Form / Packaging:

PLEXIGLAS® molding 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® 8N CoolTouch
Mechanical properties				
Tensile modulus	1 mm/min	MPa	ISO 527	3300
Stress at break	5 mm/min	MPa	ISO 527	77
Strain at break	5 mm/min	%	ISO 527	5.5
Charpy impact strength	23°C	kJ/m ²	ISO 179/1eU	20
Thermal properties				
Vicat softening temperature	B / 50	°C	ISO 306	108
Glass transition temperature		°C	IEC 10006	117
Temp. of deflection under load	0.45 MPa	°C	ISO 75	103
Temp. of deflection under load	1.8 MPa	°C	ISO 75	98
Coeff. of linear therm. Expansion	0 – 50°C	E-5 /°K	ISO 11359	8
Fire rating			DIN 4102	B2
Flammability UL 94	1.6 mm	Class	IEC 707	HB
Rheological properties				
Melt volume rate, MVR	230 / 3.8	cm ³ /10min	ISO 1133	3
Other properties				
Density		g/cm ³	ISO 1183	1.19
Recommended processing conditions				
Predrying temperature		°C		max. 98
Predrying time in desiccant-type drier		h		2 – 3
Melt temperature		°C		220 – 260
Cylinder temperature		°C		220 – 260
Mold temperature (injection molding)		°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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