Product Information

PLEXIGLAS® Optical POQ62

Product Profile:

PLEXIGLAS® Optical POQ62 is an amorphous thermoplastic molding compound based on polymethylmethacrylate (PMMA).

In addition to the familiar properties of PLEXIGLAS® molding compounds, such as

- excellent light transmission and brilliance,
- very good weather resistance,
- high mechanical strength, surface hardness and mar resistance,

PLEXIGLAS® Optical POQ62 is distinguished by its

- guaranteed purity and clarity,
- outstanding flow properties due to its low melt viscosity and its
- extremely accurate mold surface reproduction.

Application:

PLEXIGLAS® Optical POQ62 is particularly suitable for injection-compression molding and for injection-molding thin-walled parts with long flow paths. Further fields of application are two-component injection molding and special extrusion.

Examples:

Manufacture of moldings with microstructured surfaces and optical structures.

Processing:

PLEXIGLAS® Optical POQ62 can be processed on injection molding machines and extruders with conventional three-section screws for engineering thermoplastics.

Physical Form / Packaging:

PLEXIGLAS® Optical POQ62 is supplied as uniform pellets in 500kg boxes with PE lining, other types of packaging on request

Properties:

	Parameter	Unit	Standard	PLEXIGLAS® Optical POQ62
Mechanical Properties				
Tensile Modulus	1 mm/min	MPa	ISO 527	3300
Stress @ Break	5 mm/min	MPa	ISO 527	63
Strain @ Break	5 mm/min	%	ISO 527	2.8
Charpy Impact Strength	23°C	kJ/m²	ISO 179/1eU	20
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	97
Coeff. of Linear Therm. Expansion	0 - 50°C	E-5 /°K	ISO 11359	8
Fire Rating			DIN 4102	B2
Rheological Properties				
Melt Volume Rate, MVR	230°C / 3.8kg	cm³/10min	ISO 1133	21
Optical Properties	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	92
Haze			ASTM D1003	< 0.5
Refractive Index			ISO 489	1.49
Other Properties				
Density		g/cm³	ISO 1183	1.19
Humidity Absorption	23°C / 50%	%	ISO 62	0.6
Recommended Processing Conditions				
Predrying Temperature		°C		max. 80
Predrying Time in Desiccant-Type Drier		h		2 - 3
Melt 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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