

Product Texts

Productprofil:

PLEXIGLAS® Softlight 7H df22, based on PLEXIGLAS® 7H, is characterized by diffuse scattering of light.

Typical properties of PLEXIGLAS® molding compound are

- 1. good flow
- 2. high mechanical strength, surface hardness and mar resistance
- 3. very good weather resistance.

Special properties of PLEXIGLAS® Softlight 7H df22 are

- 1. very good lightdiffusion combined with excellent light transmission
- 2. matte surfaces can be obtained by varying the extrusion parameters.

Application:

Used for extruding profiles and sheets for lighting engineering applications

Example:

luminaire covers, displays, projection screens and similar lighting applications

Processing:

PLEXIGLAS® Softlight 7H df22 can be processed on extruders with 3-zone general purpose screws for engineering thermoplastics. The matte finish of profile surfaces depends very much on machine design (calibrating unit, polishing rolls) and cooling conditions. It can be enhanced by controlled temperature reduction.

Physical Form / Packaging:

PLEXIGLAS® Softlight df molding compounds are supplied as pellets of uniform size, packaged in 25kg polyethylene bags; other packaging on request.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	1.1	cm ³ /10min	ISO 1133
Temperature	230	°C	-
Load	3.8	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3400	MPa	ISO 527
^[C] Stress at break	70	MPa	ISO 527
^[C] Strain at break	6	%	ISO 527
^[C] Charpy impact strength, +23°C	20	kJ/m ²	ISO 179/1eU

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			

PLEXIGLAS® Softlight 7H df22

PMMA

Röhm GmbH

^[C] Glass transition temperature, 10°C/min	108	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	97	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	101	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	105	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	63	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	1E13	Ohm	IEC 62631-3-2

[C]: CAMPUS

Optical properties	Value	Unit	Test Standard
ISO Data			
^[C] Luminous transmittance	86	%	ISO 13468-1, -2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1190	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	252	°C	ISO 294
Injection Molding, mold temperature	65	°C	ISO 294
Injection Molding, injection velocity	195	mm/s	ISO 294

[C]: CAMPUS

Characteristics**Processing**

Profile Extrusion, Sheet Extrusion, Other Extrusion

Delivery form

Pellets

Additives

Release agent

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather

Features

Light Diffusing

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information**Profile extrusion**

PREPROCESSING

Predrying temperature: max. 95 °C

Predrying time in a desiccant-type drier: 2 - 3 h

PROCESSING

Melt temperature: 220 - 260 °C

Die temperature: 220 - 260 °C

Sheet extrusion

PREPROCESSING

Predrying temperature: max. 95 °C

Predrying time in a desiccant-type drier: 2 - 3 h

PROCESSING

Melt temperature: 220 - 260 °C

Die temperature: 220 - 260 °C