

**Product Texts**

**Productprofil:**

PLEXIGLAS® Softlight 7H df23, 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 df23 are

- 1. excellent 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 applications

**Processing:**

PLEXIGLAS® Softlight 7H df23 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
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	<b>0.95</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>230</b>	°C	-
Load	<b>3.8</b>	kg	-

[C]: CAMPUS

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

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			

**PLEXIGLAS® Softlight 7H df23**

PMMA

Röhm GmbH

<sup>[C]</sup> Glass transition temperature, 10°C/min	<b>106</b>	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>97</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	<b>101</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	<b>105</b>	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>63</b>	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	<b>&gt;1E13</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	<b>1E13</b>	Ohm	IEC 62631-3-2

[C]: CAMPUS

Optical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Luminous transmittance	<b>81</b>	%	ISO 13468-1, -2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Density	<b>1190</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	<b>252</b>	°C	ISO 294
Injection Molding, mold temperature	<b>65</b>	°C	ISO 294
Injection Molding, injection velocity	<b>195</b>	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