

**PLEXIGLAS® Satinice df22 7N**

PMMA

Evonik Industries AG

**Product Texts****Productprofil:**

PLEXIGLAS® Satinice df22 7N, based on PLEXIGLAS® 7N, is characterized by diffuse scattering of light.

Typical properties of PLEXIGLAS® molding compound are

- good flow
- high mechanical strength, surface hardness and mar resistance.

Special properties of PLEXIGLAS® Satinice df22 7N are

- very good lightdiffusion combined with excellent light transmission.

**Application:**

Used for injection molding items for lighting engineering applications

**Example:**

applications that call for light diffusion combined with optimum transmission

**Processing:**

PLEXIGLAS® Satinice df22 7N can be processed on injection molding machines with 3-zone general purpose screws for engineering thermoplastics.

**Physical Form / Packaging:**

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

<b>Rheological properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	4.3	cm <sup>3</sup> /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	3.8	kg	ISO 1133
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	3400	MPa	ISO 527-1/-2
Stress at break	65	MPa	ISO 527-1/-2
Strain at break	2.5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	17	kJ/m <sup>2</sup>	ISO 179/1eU
<b>Thermal properties</b>			
<b>ISO Data</b>			
Glass transition temperature, 10°C/min	108	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	97	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	101	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	105	°C	ISO 306
Coeff. of linear therm. expansion, parallel	63	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
<b>Electrical properties</b>			
<b>ISO Data</b>			

PLEXIGLAS® Satinice df22 7N			
PMMA			Evonik Industries AG
Volume resistivity	>1E13	Ohm*m	IEC 60093
Surface resistivity	1E13	Ohm	IEC 60093
<b>Other properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Density	1190	kg/m³	ISO 1183
<b>Material specific properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Luminous transmittance	86	%	ISO 13468-1, -2
<b>Test specimen production</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Injection Molding, melt temperature	243	°C	ISO 294
Injection Molding, mold temperature	65	°C	ISO 10724
Injection Molding, injection velocity	195	mm/s	ISO 294
<b>Characteristics</b>			
<b>Processing</b>		<b>Additives</b>	
Injection Molding		Release agent	
<b>Delivery form</b>		<b>Special Characteristics</b>	
Pellets		Light stabilized or stable to light, U.V. stabilized or stable to weather	
<b>Other text information</b>			
<b>Injection Molding</b>			
PREPROCESSING			
Predrying temperature: max. 95 °C			
Predrying time in a desiccant-type drier: 2 - 3 h			
PROCESSING			
Min. melt temperature: 220 - 260°C			
Min. mold temperature: 60 - 90°C			
<b>Chemical Media Resistance</b>			
<b>Acids</b>			
☺	Acetic Acid (5% by mass) (23°C)		
☺	Citric Acid solution (10% by mass) (23°C)		
☺	Lactic Acid (10% by mass) (23°C)		
☺	Sulfuric Acid (38% by mass) (23°C)		
☺	Sulfuric Acid (5% by mass) (23°C)		
<b>Bases</b>			
☺	Sodium Hydroxide solution (35% by mass) (23°C)		
☺	Sodium Hydroxide solution (1% by mass) (23°C)		
☺	Ammonium Hydroxide solution (10% by mass) (23°C)		
<b>Hydrocarbons</b>			
☺	n-Hexane (23°C)		
☺	iso-Octane (23°C)		
<b>Standard Fuels</b>			
☺	Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)		
☺	Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)		
☺	Diesel fuel (pref. ISO 1817 Liquid F) (23°C)		
<b>Salt solutions</b>			

**PLEXIGLAS® Satinice df22 7N**

PMMA

Evonik Industries AG

☺ Sodium Carbonate solution (20% by mass) (23°C)

☺ Sodium Carbonate solution (2% by mass) (23°C)

**Other**

☺ 50% Oleic acid + 50% Olive Oil (23°C)

☺ Water (23°C)