

GE
Plastics
Specialty Film & Sheet

Gepax* 7200 Sheet

Product Datasheet

Description

The Gepax* 7200 sheet is a flame retardant opaque polycarbonate sheet. Gepax 7200 sheet offers, in addition to its excellent mechanical and thermal properties, a good flammability and electrical performance. Gepax 7200 sheets provide: high impact performance, and excellent formability.

Typical Property Values ♦

Property	Test Method	S1 units	Value
Physical			
Density	ISO1183	g/cm ³	1.20
Water absorption, equilibrium	ISO62	%	0.35
Mechanical			
Tensile strength, yield	ISO527	MPa	55
Tensile modulus	ISO527	MPa	2000
Tensile elongation	ISO527		
yield		%	6
break		%	100
Flexural strength, yield	ISO178	MPa	100
Flexural modulus	ISO178	MPa	2200
Izod Notched Impact	ISO180/1A		
20°C		KJ/M ²	65
-20°C		KJ/M ²	10
Gardner Impact	GE Method		
20°C		J	>40
-40°C		J	>40
Taber Abrasion, CS 17, 1000g, 1000 cycles	ASTM D1044	mg	10
Notched Impact Strength, Charpy, 20 °C	DIN 53453		
Thermal			
Vicat Softening Temperature, Rate B/120	ISO306	°C	145
Heat deflection temperature 0.45 MPa	ISO 75/Be	°C	138
Thermal Conductivity	ASTM C177	W/m °C	0.2
Ball Pressure Test 75°C	IEC 335-1		Pass
Ball Pressure Test 125°C	IEC 335-1		Pass
Mold shrinkage	ISO527	%	0.6 - 0.8
Coefficient /Thermal Expansion	ASTM D696	m/m°C	7 - 10 ⁻⁵
Electrical			
Comparative Tracking Index	IEC 112/3	V	225
Comparative Tracking Index, M	IEC 112/3	V	125
Volume resistivity	IEC 93	Ohm.cm	10 ¹⁵
Surface resistivity	IEC 93	Ohm	10 ¹⁵
Flammability			
Limited Oxygen Index		%	36
Glow Wire Test, 960 °C	IEC 695-2-1		Pass (3.0mm)

♦ These property values have been derived from Lexan* resin data for the material used to produce this sheet product.

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Processing

Gepax* 7200 sheet is an excellent candidate for thermoforming. It offers high, deep draw ratios, equal wall thickness distribution, and it can be formed into complex shapes using standard thermoforming equipment. Sandwich type heating systems give the best results. Gepax 7200 sheet has a forming temperature range of 185 - 205°C. When forming, a draft angle of at least 3° should be allowed, and post mold shrinkage of 0.6 - 0.8% taken into account.

Pre-drying

It is important to ensure that Gepax 7200 sheets are free of moisture prior to thermoforming. A hot air circulating oven set at 120°C is recommended. Pre-drying times vary from 3-24hours, depending on sheet thickness.

Assembling

Parts made from Gepax 7200 sheet can be assembled with plastics, metals, rubber and other materials using many types of adhesive bonding, welding and mechanical fastening techniques. Further information and advice is available on request.

Painting

For either functional or decorative reasons it may be necessary to apply a finish to sheets or vacuum formed parts. Gepax 7200 sheet is an excellent candidate for use with a wide variety of modern decoration techniques. A list of approved paint systems and suppliers is available upon request.

Chemical resistance

Gepax 7200 sheet has sufficient resistance to most mineral oils, greases, aliphatic hydrocarbons and acids under low or moderate stress levels. In applications where the Gepax 7200 sheet will come into contact with aggressive chemicals, specific (application related) testing is always advised. Effective painting systems can improve chemical resistance.

Fire Test Performance

Gepax has good fire performance against many national fire codes dependent on thickness and color; please check with the local sales office for details.

Product Availability

Product code: Gepax 7200 sheet
Standard size: 1250 x 2050mm, 2050 x 3000mm
Gauges: 1.2 - 8.0mm
Textures: Polished/Suede Polished/Haircell
Colors Standard: Black 78927, Gray 78978, Off White 88244

Other colors/sizes are available by special request.

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