

GEPAX™ 8000 SHEET

PRODUCT DATASHEET

DESCRIPTION

The GEPAX™ 8000 sheet has been specifically developed for outside applications where color stability is required. GEPAX 8000 sheets combine extremely high impact performance with good stiffness over a wide temperature range (-30 to 110 °C). GEPAX 8000 sheets provide UV – resistance and excellent formability.

TYPICAL PROPERTY VALUES

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm ³	1.20
Water absorption, 50% RH, 23 °C	ISO 62	%	0.15
Water absorption, saturation, 23°C	ISO 62	%	0.35
MECHANICAL			
Yield stress 50 mm/min	ISO 527	MPa	>60
Yield strain 50 mm/min	ISO 527	%	6
Nominal strain at break 50 mm/min	ISO 527	%	>100
Tensile modulus 1 mm/min	ISO 527	MPa	2300
Flexural strength 2 mm/min	ISO 178	MPa	90
Flexural modulus 2 mm/min	ISO 178	MPa	2300
IMPACT			
Charpy impact, notched 23°C, 3.0 mm	ISO 179/1eA	kJ/m ²	75
Izod impact, unnotched 23°C, 3.0 mm	ISO 180/1U	kJ/m ²	NB
Izod impact, notched 23°C, 3.0 mm	ISO 180/1A	kJ/m ²	70
THERMAL			
Vicat softening temperature, rate B/120	ISO 306	°C	145
Temperature of deflection under load (type A), 1.8 MPa, flat	ISO 75	°C	127
Thermal conductivity	ISO 8302	W/m.°C	0.2
Coefficient of linear thermal expansion, 23-55°C	ISO 11359-2	1/°C	7x10 ⁻⁵
Ball pressure test 125 ±2°C	IEC 60695-10-2	-	Pass
ELECTRICAL			
Volume resistivity	IEC 60093	Ohm.cm	>10 ¹⁵
Dielectric strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	18

◆ 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™ 8000 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 8000 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.

CHEMICAL RESISTANCE

GEPAX 8000 sheet has sufficient resistance to most mineral oils, greases, aliphatic hydrocarbons and acids under low or moderate stress levels. In applications where the GEPAX 8000 sheet will come into contact with aggressive chemicals, specific (application related) testing is always advised. Effective painting systems can improve chemical resistance.

PRE-DRYING

It is important to ensure that GEPAX 8000 sheets are free of moisture prior to thermoforming. A hot air circulating oven set at 120°C is recommended. Pre-drying times are:

Sheet thickness (mm)	Drying time (hrs.)
3	4
4	10
5	16
6	24

ASSEMBLING

Parts made from GEPAX 8000 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.

FIRE TEST PERFORMANCE

GEPAX sheet has good fire performance against many national fire codes dependent on thickness and color; please check your local sales office for details.

PRODUCT AVAILABILITY

Product code:	GEPAX 8000 sheet
Configuration:	2 side UV coextrusion, ABA
Standard width:	Grade: 8000: 1250 & 2050 mm Grade: 8005: 1300 & 2050mm
Gauges:	2.0 - 8.0mm
Textures:	Polished/Polished & Polished Mat/Polished
Colors Standard:	Black 78927, Light Gray 78944, Off White 78943 Other colors/sizes are available by special request.

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