

DURATEC®-XP

New high strength engineering insulation material. DURATEC-XP® is a new advanced composite in glass fibre technology, with the following characteristics:

- Toughness giving near 'plastic' performance
- Strength at elevated temperature
- Non-brittle/flexible behaviour
- Electrically inert



ADVANTAGES AND PROPERTIES

- High electrical resistance
- Large board format
- Good physical and mechanical properties
- Easily machinable
- Thermal and electrical insulation properties
- Thermally resistant to 600°C

WORKING AND PROCESSING

Promat and its approved convertors are well equipped with special processing machines.

- Cutting to Size
When cutting to size, the maximum workplace concentration values for dust generation must be observed. In general dust suction is recommended.
- Storage
DURATEC-XP® should be transported and stored under dry conditions.
- Health and safety
Safety data sheets are available on request from Promat.
- Technical information
For additional details of product properties and applications please contact Promat Technical Services.

AREAS OF APPLICATION

- Induction furnace components
 - Melting
 - Heating
- Electrical insulation
 - Arc chutes



DURATEC®-XP TO 600°C



TECHNICAL DATA

Product Name	DURATEC® XP	
TYPICAL PRODUCT PERFORMANCE		
Compressive strength	>185	Mpa
Flexural strength	>40	Mpa
Modulus of elasticity	4,5	GPa
Normal Density	1800	kg/m ³
Hardness	90	Shore D
Toughness (charpy test)	31.85	kJ/m ²
Maximum Service Temperature	700	°C
Thermal conductivity λ	50°C	0,40
	400°C	0,34
ELECTRICAL PROPERTIES		
Flatwise electrical strength	1,8	kV/mm
Arc resistance, stage 40 (40 mA)	>420	s
Volume resistivity	25°C	5,2 x 10 ¹²
	600°C	1,2 x 10 ⁹
Surface resistivity	25°C	2,4 x 10 ¹³
	600°C	2,1 x 10 ⁹
Dissipation factor	25°C	0,094
Relative permittivity	25°C	4,05
Comparative Tracking Index	600	
Flammability	FH1	

Toleranties
Thickness: ± 1 mm
Width & length: ± 4 mm

Maximum service temperatures are application specific. Practical trials in induction furnaces, cookware manufacture and arc chutes have indicated satisfactory performance at temperatures up to 900°C dependent on time exposure.

STANDARD SIZES

Dimensions

DURATEC® XP

1200 x 900 x 5 mm

1200 x 900 x 8 mm

1200 x 900 x 10 mm

1200 x 900 x 12 mm

1200 x 900 x 15 mm

1200 x 900 x 20 mm

1200 x 900 x 25 mm

1200 x 900 x 30 mm

Promat contains the right to change without notice the properties and values of all products. The given technical values are obtained in specific conditions and are average and indicative. In case of any doubt if these properties and/or values are matching the application requirements, please contact Promat for advise.

