

# POROMAT® ME 2242

## Description:

Swellable porous epoxy glass matt, both sides PET-fleece covered, contains additional accelerator, for epoxy acid anhydride hardener system.

## Properties:

POROMAT® ME 2242 contains only a small amount of binder and therefore it is porous and absorbent. At temperatures > 60° C or in contact with impregnating resins the laminate swells to about 200 % of the initial thickness and fills up an existing free space. The developed pressure is approx. 0,1 N/mm<sup>2</sup>.

The properties of the final "laminate" depend on the impregnating resin used and the swelling grade.

## Application:

POROMAT<sup>®</sup> ME 2242 can be used in VPI systems as interlayer, spacer or filling material in different parts of electrical windings.

POROMAT® ME 2242 was developed specially for impregnating resins based on epoxy anhydride, but other resins may be used as well after testing.

#### Materials:

POROMAT® ME 2242 consists of glass mat compressed with a small amount of epoxy resin to a rigid but porous laminate.

POROMAT® ME 2242 is covered on both sides with a thin PET-fleece to prevent glass dust during processing.

POROMAT® ME 2242 contains an accelerator for epoxy anhydride impregnating resins.

## Processing advice:

POROMAT® ME 2242 can be cut with hammer shears. Small strips should preferably be made out of thin laminates.

## Formats:

Thickness: 0.50; 0.85; 1.2; 2.2 mm Size:  $2000 \pm 50 \times 1000 \pm 50 \text{ mm}$  $1000 \pm 50 \times 1000 \pm 50 \text{ mm}$  $1000 \pm 50 \times 500 \pm 50 \text{ mm}$ 



Storability:

min. 6 months at 20° C min. 12 months at 5° C

Attention: Do not store above 30° C!!



## **Technical Data**

POROMAT® ME 2242						
Properties	Test method	Unit	Value	Value	Value	Value
Nominal thickness		mm	0.50	0.85	1.2	2.2
Tolerance	DIN 863	mm	± 0.2	± 0.3	± 0.3	± 0.3
Total substance	ISO 3374	g/m²	660 ± 115	1270 ± 225	1880 ± 335	3710 ± 665
Glass content		g/m²	435 ± 90	870 ± 170	1305 ± 255	2610 ± 510
PET-fleece (both sides)		g/m²	50 ± 5	50 ± 5	50 ± 5	50 ± 5
Organic content (Resin. organic accelerator content. finish. PET-fleece)	ISO 1887	g/m²	225 ± 25	400 ± 55	575 ± 80	1100 ± 155
Zincnaphtenat content		g/m²	25 ± 5	53 ± 7	80 ± 10	160 ± 20
Swelling 1 hour at 70° C in water (referred to initial thickness)	IPV no. 41	%	≥ 150	≥ 150	≥ 150	≥ 150
Compressive strength parallel to laminations after impregnation with Votastat 100:90 at 0 % swelling at 100 % swelling	DIN 53454	MPa MPa	≥ 400 ≥ 250	≥ 400 ≥ 250	≥ 400 ≥ 250	≥ 400 ≥ 250
Colour			red	red	red	red