



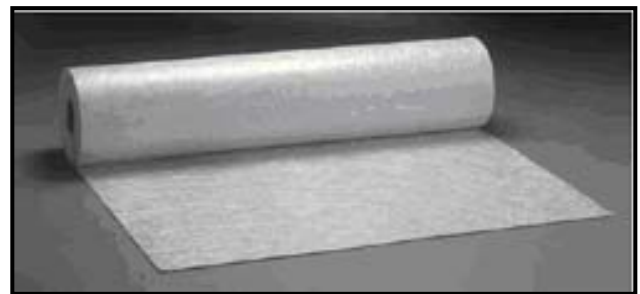
# M705

## Chopped Strand Mat for Hand Lay-up

This product is produced using Advantex® glass fiber. Advantex glass fiber combines the electrical and mechanical properties of traditional E-glass with the acid corrosion resistance of E-CR glass.

### PRODUCT DESCRIPTION

M705 mat is made of randomly oriented chopped glass strands bonded together in mat form using an emulsion binder. The emulsion binder uniquely bonds the mat so that it conforms rapidly to highly contoured molds. It is a porous, well bonded mat which maintains its integrity during the impregnation process and provides an uniform wet-through rate. The emulsion binder produces superior handling properties compared to powder bonded mats.



### PRODUCT APPLICATION

- M705 mat is a reinforcement for use with unsaturated polyester resins in the hand lay-up process. Ideal for applications such as auto parts, boats, chemical tanks and swimming pools.
- Typical applications are those which require a high glass content and good mechanical properties. M705 is ideal in applications requiring rapid impregnation and excellent wetting. M705 has excellent handling and tailoring properties as well as the ability to conform rapidly to even the most complex molds.

### FEATURES AND PRODUCT BENEFITS

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Excellent impregnation properties</li> </ul> | <ul style="list-style-type: none"> <li>• Quick wetting with rapid air release maximizes holding productivity and reduces resin demand, thereby reducing costs</li> </ul>         |
| <ul style="list-style-type: none"> <li>• Excellent conformability</li> </ul>          | <ul style="list-style-type: none"> <li>• The ease of handling and ability to conform rapidly to complex molds helps in making high quality parts with ease</li> </ul>            |
| <ul style="list-style-type: none"> <li>• Good mechanical properties</li> </ul>        | <ul style="list-style-type: none"> <li>• Good bonding with low resin demand provides excellent laminate properties as demonstrated with the Lloyds/dnv certifications</li> </ul> |

### PRODUCT AVAILABILITY

Standard weight (g/m2)	Standard width (cm)
300, 450,600, 900	95, 104,125

Additional weights and widths may be available upon request.

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### MECHANICAL PROPERTIES

The following are the typical laminate properties of M705 in an orthophthalic polyester resin, glass content 31% by weight, molded by hand lay-up using Lloyd's specifications. M705 shows excellent performance equal to and/or exceeding competitive products.

M705 is approved by Lloyd's Register of Shipping and Det Norsk Veritas.

Property	Method	Unit	M705
Tensile Strength	ISO3268/DIN 53455	Mpa	108
Tensile Elongation	ISO3268/DIN 53455	%	1.8
Tensile Modulus	ISO3268/DIN 53455	Mpa	7800
Flexural Modulus	ISO 178	Mpa	6770
Flexural Strength	ISO 178	Mpa	204
Flexural Elongation	ISO 178	%	3.4

### PACKAGING (standard ref.)

Mat width (cm)	Roll diameter (cm)	Roll weight (kg)	Rolls / pallet	Pallet size (cm)
95	30	41	12	127 x 97
104	27	32	16	113 x 113
125	30	55	12	127 x 97

M705 mat is wound into a roll on a 3-inch diameter cardboard inner tube. Rolls consist of a single continuous length of mat. If a break occurs in the mat, it is marked with a colored paper slip. A maximum of three breaks are allowed in any one roll.

### LABELLING

- Each roll bears a label stating product description, product nominal weight (g/m<sup>2</sup>), product roll width, product code, net weight, production number and shift number, roll number.
- Mat rolls are supplied in a protective polythene bag in a one-piece carton box. These are placed vertically on wooden pallets and shrink-wrapped for stability and protection.

### STORAGE

It is recommended that glass fiber products are stored in a cool dry area. Temperature should not exceed 35°C and the relative humidity should be kept below 75%. The glass fiber material should remain in its packing material until just prior to use. To avoid moisture pick-up on the glass, care should be taken not to open a container prior to conditioning to room temperature.

To avoid damage to the products and to ensure safety, pallets should be stacked no more than two high.



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