Technical Data Sheet

BC GRP Matt

Glass Fiber Reinforcement Matt

1). Product Description

BC GRP Matt is a high-quality, non-woven glass fiber reinforcement mat manufactured from randomly oriented chopped glass filaments (approx. 50 mm) bonded together with either powder or emulsion binder.
It is compatible with unsaturated polyester, vinyl ester, epoxy, and phenolic resin systems, making it suitable for a wide range of FRP composite applications.
BC GRP Matt provides excellent wet-through, high tensile strength, consistent fiber distribution, and superior mechanical properties, enabling reliable processing in hand lay-up, filament winding, pultrusion, and compression molding applications.

2). Recommended Uses

Suitable for the production of FRP parts such as:

- Automotive components & ceiling panels
- Marine and ship body laminates
- Electrical insulating components
- Sanitary ware
- Anti-corrosive pipes & chemical resistant tanks
- Water tanks & cooling towers
- General-purpose fiberglass reinforced structures

3). Features & Benefits

- High tensile strength – ideal for large-area laminates
- Excellent resin wet-out with rapid air release
- Uniform fiber distribution for enhanced laminate quality
- Low static & clean handling – no loose flying fibers
- High mechanical strength after curing
- Good corrosion & chemical resistance
- Compatible with all major resin systems

4). Technical Data

Typical Properties

Weight (gsm)	Area Weight Tolerance (%)	Moisture Content (%)	Binder / Size Content (%)	Tensile Strength (N)
100	±5%	≤0.20%	10.5% (±3%)	80
150	±5%	≤0.20%	8.0% (±3%)	80
200	±5%	≤0.20%	5.0% (±3%)	100
225	±5%	≤0.20%	4.5% (±3%)	100
300	±5%	≤0.20%	4.0% (±3%)	120
375	±5%	≤0.20%	3.8% (±3%)	120
450	±5%	≤0.20%	3.7% (±3%)	140
600	±5%	≤0.20%	3.5% (±3%)	160

Test Standards:
ISO 3374 – Area Weight
ISO 3344 – Moisture
ISO 1887 – Binder Content
ISO 3342 – Tensile Strength

5).APPLICATION METHODS

- Hand lay-up
- Filament winding
- Pultrusion
- Compression molding
- Spray-up compatible (as reinforcement layer)

The mat provides rapid resin penetration and uniform consolidation when used with standard FRP processing equipment.

6). Packing

- Rolls wound on cardboard tubes (76–100 mm internal diameter)
- Each roll packed in individual cardboard box (approx. 285 × 285 mm; height equal to mat width)
- 16 rolls per pallet, wrapped and strapped
- Alternate: Rolls wrapped with kraft paper or PE film as required
- Strips or cut-size rolls available upon request

7). Storage

- Store in a dry, cool, and sheltered area.

  Recommended conditions:
- Temperature: 15 °C – 35 °C
- Relative Humidity: 35% – 65%
- Avoid moisture absorption for best performance.

  Pallets should not be stacked more than 3 layers high.

8). Shelf Life

12 months from production date when stored in original, unopened packaging under recommended conditions.

9). Safety Precautions

- Avoid breathing fiberglass dust—use suitable PPE.
- Wear gloves and long sleeves to prevent skin irritation.
- Follow standard handling procedures for fiberglass materials.
- Refer to MSDS for more details.