



CHEMICAL 2023 CATALOGUE







WE ARE THE BEST PARTNER FOR COMPOSITE MANUFACTURERS

Berra works as a supplier for companies in the composite industry.

We undertake the role of raw material provider through our various distributorship agreements.

We deliver and supply all products used for pre-pulping in the composite industry, with our own vehicles.

To access our detailed product lists and catalogue, log in via the link near.

EXPERIENCE OUR CHEMICAL SERVICE







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As BERRA, we have been supplying proven raw materials and state-of-the-art machinery equipment to the Fiber Reinforced Polymer (FRP) and Glass Fiber Reinforced Concrete (GRC) industries through mergers and acquisitions since 2001. BERRA Composite Family, which represents nearly 30 brands, says "Different vision, Solutions That Make a Difference!" It is among the most dynamic and innovative actors of its sector with its principle.

BERRA Composite team provides a wide range of service experience with its machines for GRP and GRC applications, as well as multifeatured raw materials and additives for the polymer industry. The main aim of our qualified team, which cooperates with different cultures at home and abroad, is to always keep customer satisfaction at the highest level.

For GRC (Glass Fiber Reinforced Concrete) production, which is widely used in the construction and precast sectors; In addition to the stock supply of concrete additives such as Alkali Resistant (AR) glass fiber reinforcements, mold release agent for concrete, acrylic polymer and plasticizers; BERRA Family, which wholeheartedly believes in sustainability and green environmental movement, is the largest supplier of expanded glass sphere products in Turkey. Expanded glass sphere product; It is an insulation material that is used as a recyclable and ecological product in the construction industry and is frequently included in green building projects. BERRA Composite represents this special product in Türkiye and 8 countries in the nearby geography.



Sectors

BERRA Composite has been using innovative and high quality raw materials since 2001; It is available to a wide range of industries including transportation, building construction, energy, sports entertainment, maritime and aviation. In order to bring high performance composite solutions to more sectors, the products under Berra Composite are constantly evolving.

Water Slides
Engineering Plastics
Chemical Storage and Infrastructure
Building and construction
Caravan - Tiny House
CFRP Structure Development
Yacht Applications
Defense industry
unmanned Aerial Breaks



Glass Fiber Reinforcements General Purpose Glass Fiber Felt

Brand: ŞİŞECAM

- Liquid and powder binder felts produced from E-Glass have been developed for traditional hand lay-up applications with homogeneous weight distribution, easy wetting, low resin consumption, minimum rolling and good tensile properties. Different options are also available as e-glass with or without boron.
- 300-375-450-600 g/m2 with Liquid Binder 300-375-450-600 g/m2 with Powder Binder Combi Felt
- Non-standard A Felt 450-600 g/m2
- • Non-standard B Felt 175-225-300-375 g/m2 • Piece Felt – in box Low Weight Glass Fiber Felt

Brand: PD FIBRE GLASS. TAIWAN GLASS

- It is a felt product with dust binder produced from E-Glass. It is preferred in applications where low fiber density is required, and can be used as a transition felt layer before high-grammage felt to be applied after gelcoat.
- 65-80-100-150-225 g/m2 Felts from Continuous Fibers Brand: 3B FIBERGLASS
- Continuous Fiber Felt is a type of non-woven multi-layer felt produced from continuous E-CR glass fibre. Glass fibers are bonded to each other with a silane-based binder. It is available in powder or liquid with two separate binders. Felts with both types of binders are divided into types according to their lay-down, hardness, wetting time and strength values. Continuous Felts are used especially in pultrusion, closed molding, infusion and injection processes.



Glass Fiber Reinforcements Single Ended Glass Fiber Roving

Brand: ŞİŞECAM, CPIC FIBERGLASS

- Single-ended roving product is produced from E-glass fibre. It has the characteristics of good dissolution, good processability, non-cottoning, fast and complete wetting and high mechanical strength, and is suitable for roving winding and pultrusion. Its silane-based binder is compatible with polyester, vinylester and epoxy resins.
- 600-1200-2400-4800 Tex Single Ended E-Glass Fiber Roving (\$İŞECAM)
- 600-1200-2400-4800-9600 Tex Single Ended ECR-Glass Fiber Roving (CPIC FIBERGLASS)

Multi-Ended Clipable Glass Fiber Roving Brand: ŞİŞECAM

- Choppable Glass Fiber Roving is produced by bringing E glass fiber bundles together and winding them on a bobbin as a thread (roving). It is designed for general purpose clippable roving applications and SMC process with uniform unraveling, good clippability, good fiber distribution, fast wetting, very low static electricity, very low phase, high mechanical performance and good surface performance. SMC-BMC production methods are one of the fastest production methods used in composite material production. Due to its investment cost, it is preferred in the production of high quantities of composite parts (engine covers, sewer covers, electrical panels, service trays).
- KCR2 2400 Tex Roving
 SMC3 2400 Tex Roving
 LFT Compatible Single Ended Glass Fiber Roving for Thermoplastic Resins

Brand: TAIWAN GLASS

- Single-ended e-glass fiber rovings suitable for the production of Long Fiber Thermoplastic (LFT), called Long Fiber Thermoplastic (LFT), are available in 1200 and 2400 tex, compatible with PA, PP and PC resins.
- TGI 474 for PA Resin TGI 442 for PP Resin



High ZrO2 Ratio AR Glass Fiber Roving

Brand: HUIERJIE, NIPPON ELECTRIC GLASS

- GRC (glass fiber reinforced concrete) is formed by reinforcing a high-performance cement-based composition with "alkali resistant glass fiber". Thanks to the zirconium (ZrO2) on the AR (alkali resistant) glass fiber, it provides corrosion resistance against the alkali and acid resistance in the cement and acts as reinforcement without melting in the cement. Alkali-resistant glass fiber prevents the spread of cracks in concrete. In addition, it offers high tensile strength as well as the compressive strength of normal concrete. The strength of fiber is 3 times that of steel, and its flexibility is 4 times that of steel. The fiber and GRC concrete mixture is applied on the mold by spraying it simultaneously using trimmer and spraying GRC machines. Glass Fiber Woven Brand: HITEX
- Weavings produced using E-glass roving are classical weaving; Textiles produced from e-glass yarn are called woven fabric. The choice of classical woven or woven fabric is made according to the area of use.
- 100 g/m2 Woven Fabric (Plain-Twill)
- 135 g/m2 Woven Fabric (Plain)
- 160 g/m2 Woven Fabric (Twill)
- 200-300 g/m2 Woven Fabric (Plain-Twill) 500-800-1000 g/m2 Woven Classic



Glass Fiber Reinforcements

Multiaxial Glass Fiber Fabrics

Brand: METYX

- High performance multiaxial textiles are produced by combining one or more unidirectional fiber layers in different directions and weights. It is generally used in the production of large-scale composite parts where mechanical performance is expected.
- UD 300-600 g/m2 / LT 0/90: 300-600-850 g/m2
- X +45/-45: 300-400-450-600-800-936 g/m2
- XT -45/90/+45: 800 g/m2 / XL 0/-45/+45: 800 g/m2 Q 0/-45/90/+45: 625-850-1200 g/m2

Metycore RTM Fiber Brand: METYX

- •It is a type of fiber designed with a polypropylene flow medium, between two glass fiber felt layers, for RTM production, standing out with its easy-to-mold and excellent resin flow features.
- 300M / 180PP1 / 300M 450M / 180PP1 / 450M 600M / 180PP1 / 600M 300M / 250PP1 / 300M 450M / 250PP1 / 450M 600M / 250PP1 / 600M Surface Tulle (Cortel)

Brand: FREUDENBERG, METYX

- Surface tulle is a non-woven reinforcement. It is generally used to obtain smooth and resin-rich protective surfaces in roving winding and pultrusion processes. In mold applications, it is used as the first fiber layer immediately after the gelcoat, preventing the pattern of higher weight reinforcements that will be placed behind it from passing onto the gelcoat surface.
- · C Glass 26 g/m2 Surface Tulle
- Polyester Based Surface Tulle 35-50 g/m2