

GLASS FIBER®

Alkali-Resistant Fiber for Cementitious Composites



GLASS FIBER® is an alkali-resistant (AR) glass fiber product intended for cementitious composites and selected reinforcement applications. It is designed to disperse through the matrix and support mechanical performance and durability.

Applications

- Glass fiber-reinforced concrete (GRC/GFRC) elements
- Concrete and cementitious composites
- Surface repair mortars
- Components exposed to vibration or dynamic loading
- Selected resin, adhesive and industrial composite systems after trials

Approvals / Standards

ASTM C1666/C1666M is an industry reference for AR glass fiber used in cementitious products. Request current product conformity documentation where compliance is specified.

Features / Benefits

- Alkali-resistant grade for cementitious environments
- Supports tensile, flexural, impact and abrasion performance
- Promotes uniformity when correctly mixed with granular constituents
- Moisture resistant and electrically non-conductive
- Compatible with selected concrete adhesives and resins after testing

Guideline for Use

Introduce the fibers progressively at suitable intervals during mixing. Use a mixing sequence that produces uniform distribution without fiber balls or clumps. Confirm dispersion, workability, finishing and mechanical performance by trial batches.

Dosage

Determine dosage from the project requirement, fiber geometry, matrix composition and trial results. No universal dosage is stated for this product.

Compatibility

Evaluate compatibility with cement, supplementary cementitious materials, admixtures, bonding agents, resins and the selected mixing process. Fiber sizing and geometry can affect dispersion and matrix bond.

Mixing Control

- Add progressively, not as one compact mass
- Maintain sufficient mixing energy and time for dispersion
- Avoid over-mixing that damages fibers or degrades workability

Trial Requirements

- Check workability, air content, finishing and fiber distribution
- Test the required flexural, tensile, impact or abrasion performance
- Confirm pumpability and surface quality at full production scale

Limitations

AR designation alone does not confirm a specific zirconia content, fiber geometry or standard compliance. Obtain the current commercial specification and batch documentation for project submittals.

Product Information

Material	Glass fiber
Grade	Alkali-resistant (AR), as stated in ALPAKA product information
Physical Form	Fibers
Primary Use	Reinforcement of cementitious and compatible composite systems
Packaging	Bag
Storage Condition	Closed, dry and protected from moisture and damage
Recommended Dosage	Project-specific; determine by mix design and trials
Geometry / Zirconia Content	Refer to the ordered grade specification and batch CoA

Storage

Keep bags closed until use. Store dry, under cover and protected from moisture, direct sunlight, contamination and physical damage. Reseal partly used bags promptly and keep grade and batch identification legible.

Basis of Data

Technical information in this sheet is based on ALPAKA product information and general industry references. Values described as approximate are not release specifications. Actual performance may vary with raw materials, formulation, temperature, process and site conditions. Verify critical properties on the current batch documentation.

Precautions

Fibers and handling dust may cause mechanical irritation to skin, eyes and the respiratory tract. Avoid unnecessary dust, and wear gloves, long sleeves, safety glasses and suitable respiratory protection where required. Follow the current product-specific SDS.

Fire / Cleaning and Disposal

Refer to the SDS for fire response. Use an extinguishing medium suitable for packaging and surrounding materials. Collect offcuts and spilled fibers without dispersing dust. Recycle or dispose of product and packaging in accordance with local requirements.

Additional Information

For current specifications, application support and trial guidance, contact ALPAKA Chemical Group:
info@alpakagroup.com | +98 933 202 3003 |
www.alpakagroup.com.

Important Notes

The information and recommendations in this Product Data Sheet are given in good faith and reflect ALPAKA's current knowledge of the product when correctly stored, handled and used under normal conditions. Materials, formulations, substrates, production methods and site conditions vary; therefore no warranty of merchantability or fitness for a particular purpose can be inferred from this document. The user is responsible for confirming suitability through representative trials and for complying with applicable laws, standards, approvals and third-party rights. The current commercial specification, batch Certificate of Analysis and product-specific Safety Data Sheet take precedence over this document. Refer to the most recent issue for the product concerned.