

## ECA-ARGlassFiber For Concrete Mix

### ECA-ARGlassFiber

Alkali Resistant (AR) GlassFibers are designed specifically for use in concrete to prevent cracking. They are manufactured from a specially formulated glass composition to be suitable for use in concrete. ECA-ARGlassFiber are particularly suitable for Premix GFRC and other mortar and concrete reinforcement applications, such as the general ready-mix concrete and precast industries. They have high tensile strength and modulus, do not rust like steel, and are easily incorporated into concrete mixes.

**Chopped GlassFibers** Length size: 3 mm, 6 mm, 9 mm & 18 mm, 19 mm, 24 mm and customizable length size.

These Alkali Resistant ECA-ARGlassFiber will drastically improve the structural integrity of GFRC mix, general ready-mix and precast concrete.

#### Why use ECA-ARGlassFiber?

- Quick dispersion for short mixing times
- Alkali Resistant
- Acid Resistant
- High tensile strength and modulus of elasticity
  - Three times the tensile strength of steel-reinforced concrete
- High affinity to cementitious composites with similar density



## SHIPPING

Up to 20 pallets (two layers) can be loaded in the US 20-foot container, total net weight approximately 16 tons.

## PACKAGING

Each tray has 14 layers, each layer has 4 plastic bags, a total of 56 plastic bags.

(Can be customized from 6kg to 18kg per bag)

The entire tray is sealed with plastic, and two signs are attached to the tray.

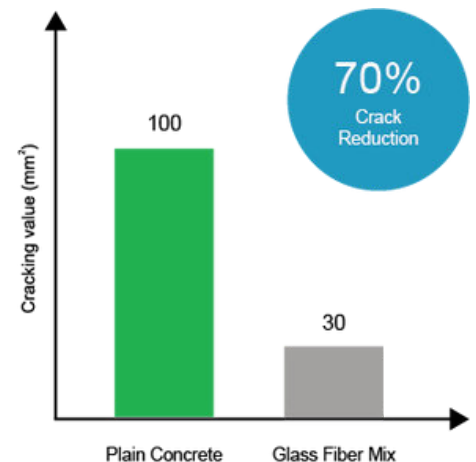
## STORAGE

Please keep products away from heat and moisture and keep the original packaging for optimal storage. If the product is stored at a low temperature, it is recommended to put it in the working environment for more than 24 hours before use to prevent moisture condensation from forming on the surface of the product.

- Storage temperature: 15°C –35°C
- Storage humidity: 35% –65%

## HELPFUL FACTS ABOUT ECA-ARGlassFiber

- They can be used in general ready-mix concrete and precast elements
- They can work with normal and regular concrete
- The fibre is resistant to alkaline environments
- The alkali content limit is 0.6 by mass of cement
- The different dimensions of GlassFiber have different effects on ASR and ACR (good resistance to both)
- Their behaviour against AAR in aggregates is a 70% average reduction of cracks (See graph on the right)



## Comparison Between Some Raw Materials:

Raw Material	Density	Elastic Modulus(GPa)	Tensile Strength (MPa)
Concrete	2.4	30-40	3-4
ECA-ARGlassFiber	2.7	70	700
Steel	7.8	210	600
Polypropylene	0.9	1.5-9.5	100-500

## ECA-ARGlassFiber Properties:

Length of strand	Physical State	Melting Point	Diameter of Fiber	Elongation at Break	Density	Modulus of elasticity	Tensile Strength
18 mm/ 19 mm	Solid White	800°C Softening Point	10-13µm	3.70%	2.7g/cm <sup>3</sup>	70GPa	700MPa