

PRECAST CONCRETE / MACRO SYNTHETIC FIBRE

# HIGH STRENGTH 48

Embossed virgin PP macro synthetic fibre for precast concrete



## 1 PRODUCT DESCRIPTION

High Strength 48 is a white macro synthetic fibre made from 100% virgin polypropylene with no added additives. Its flat profile and diamond-embossed surface are designed to promote mechanical interlock within concrete. It is intended for precast concrete applications where the fibre selection and dosage are verified for the project.

SEGMENTAL LININGS

PRECAST PILES

PRECAST COMPONENTS

## 2 TECHNICAL PROPERTIES

| PROPERTY            | DECLARED VALUE                          |
|---------------------|-----------------------------------------|
| Material            | 100% virgin polypropylene; no additives |
| Form                | Flat fibre with diamond embossing       |
| Colour              | White                                   |
| Standard length     | 48 mm; custom lengths by agreement      |
| Equivalent diameter | 0.95 mm                                 |
| Tensile strength    | $\geq 570$ MPa                          |
| Elongation at break | $< 30\%$                                |
| Elastic modulus     | $\geq 11$ GPa                           |

Declared values are product specifications. A commissioned test result is a sample result and is not presented as a guarantee for every batch.

### 3 RECOMMENDED DOSAGE

Recommended starting range for precast concrete. Final dosage must be established by project design, trial mixes and production validation.

## 4-8 kg/m<sup>3</sup>

DOSAGE BASIS: MASS OF FIBRE PER CUBIC METRE OF CONCRETE

### 4 BATCHING AND MIXING

- 1 Determine the required fibre dose by weight. Plant batching equipment may meter the same preset mass for each concrete batch.
- 2 Add the unopened water-soluble collated fibre units with the cement and aggregates during the normal charging sequence; no field weighing is needed when the batching system meters the dose.
- 3 After all fibre has entered the mixer, continue mixing for an additional 3-5 minutes, or until uniform dispersion is confirmed.
- 4 Validate the charging sequence, mixer loading and mixing time in a plant trial before regular production.

### 5 PACKAGING AND STORAGE

#### PACKAGING

Water-soluble film collated bundles packed in cartons. Standard carton net weight: 5 kg or 10 kg.

#### STORAGE

Store dry, protected from moisture and direct sunlight. Keep the original packaging closed until use.

### 6 TEST DOCUMENTATION

Selected physical-property data are supported by commissioned report JCBG(01)250307820, tested to GB/T 21120-2018. A public scan copy may be provided for reference; the formal stamped report is not published. Residual strength is not declared. Energy absorption of  $\geq 550$  J is a factory-confirmed reference value, but is not published in this revision because the original traceable test record is unavailable.

### 7 IMPORTANT USE NOTICE

Recommended dosage and processing guidance are starting points only. Confirm suitability through project-specific trial mixes, production trials and, where required, independent testing. This TDS is not a structural design, acceptance certificate or third-party test report.

#### MANUFACTURER

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#### INTERNATIONAL SALES

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