

PRODUCT Nº 1.458

## SAT FILS

### POLYPROPYLENE FIBRES TO REDUCE CRACKING IN CEMENT MORTARS FOR FLOORS RAISING

#### DESCRIPTION

**SAT FILS** are polypropylene fibres, length of 12 mm., with an easy dispersion and recommended to be used in cement mortars for raised floors, of 4-5 cm thick, used to reduce cracking due to shrinkage in plastic state. Fibres are treated to improve wetting and dispersion in the paste and to increase capacity of contact and adhesion between fibres and the matrix of cement in hardened solid state.

#### CHARACTERISTICS

- Reduced weight and easy application.
- Higher chemical resistance than steel (acids, alkalis, salts, etc.)
- Resistant to alkalis in cement.
- No oxidation or rotting.
- Damp-proof properties.
- Low coefficient of elasticity
- Mechanism of three-dimensional action
- Control of plastic shrinkage with cracking reduction

#### EMPLOYMENT

Add a bag 0,600 kg. of product in 1 m<sup>3</sup> of mortar. That is equivalent to a dosage of 0,600 kg/m<sup>3</sup> To incorporate as any other component by tempering. Mix dry for 2 to 4 minutes, and after that with the water or already prepared mass. Add the fibres to the concrete mixer and beat during 4-6 minutes to assure an homogeneous mixing.

#### SPECIFICATIONS

Specific gravity	0.915 g/cm <sup>3</sup>
Length	12 mm
Melting point	160°C - 170 °C
Ignition point	590 °C
Registration of ductility	Low
Electric conductivity	Low
Acids and salts resistance	High
Tensile strength	0.28 - 0,77 KN/mm <sup>2</sup>
Coefficient of elasticity (Young's modulus)	2,1 - 3.5 KN/mm <sup>2</sup>
Alkalis and chemicals resistance	Good

#### SPECIAL RECOMMENDATIONS

- This product doesn't replace any frame or structural mesh.
- To facilitate a greater dispersion of fibres we recommend crumbling meanwhile they are added

## USES

- In cement mortars for floors raising to reduce cracking by plastic and hydraulic shrinkage of cement.
- Dry mortars

## ADVANTAGES

- Strong plastic and hydraulic cracking shrinkage reduction
- Increases tensile strength and impact resistance and ductility.
- It provides cohesion and improves mechanical proprieties in general.
- It improves resistance to chemical attacks.
- Reducing of permeability to water and water absorption
- It reduces the amount of bleeding.
- It increases the resistance of the freeze/thaw cycles.
- Increases the durability of concrete and cement structures.
- Improvement of the aesthetic aspect
- Homogeneous distribution of fibres.
- It allows a smaller addition of water to the masses as an excess could produce segregations.

## PACKAGING

Bags of 0,600 kg.

To be stored on clean and dry surfaces, under roofing.

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