# SINTA® 6 mm

# Polypropylene Fibers

## **Product Description**

SINTA is a high-performance, monofilament, polypropylene fibre developed as a crack controlling additive for cementitious materials. It is used to inhibit the formation of small cracks which can occur through plastic shrinkage, premature drying and early thermal changes, in order to provide utilisation of the intrinsic properties of the hardened cementitious material.

SINTA is based on selected raw materials and manufactured under controlled conditions to give a consistent product. Specially designed for crack control in cementitious materials covering areas such as ready mix concrete, precast concrete, screeds, conventional shotcrete, rendering mortars, etc.

Principle uses of such fibre concrete include: concrete slabs, pavements, driveways, imprinted concrete, curbs, pipes, grouts, shotcrete and sprayed concrete, overlays, patch repair, microsilica concrete, thin section walling, sea defence and marine applications, water retaining structures, marine concrete, heavy industrial floors, etc.

The product is also suitable for use in tunneling and passive fire protection.

<b>Typical Properties</b>	
Appearance	Silvery white fibre, bundles.
Air Entrainment	Nil
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Chloride Content	Nil
Constituents	Polypropylene
Fibre Length	6 mm
Fibre Thickness	18 microns
Specific Surface Area	225 m²/kg

# **Advantages**

- Inhibits intrinsic cracking in concrete, improved plastic shrinkage crack control
- · Disperses uniformly throughout the mix
- · Improves finishing characteristics
- · Improves concrete durability
- · Increases impact and abrasion resistance
- Rust and corrosion proof
- · Improved explosive spalling and passive fire resistance
- · Impervious to alkali attack
- · Decreases construction time and labour
- Reduced risk of subsequent damage.

#### **Method Of Use**

SINTA is supplied ready for use, in concrete dispersible bags, which contain measured quantities for addition to the concrete mix either at the batching plant or on site. Fibres should be added to the cementitious matrix and mixed for 5 minutes to ensure full dispersion.

Under special circumstances it may be necessary to adjust the mode of addition and mixing cycle to suit specific applications.

The addition of SINTA may produce a slight reduction in workability while increasing the cohesiveness of the mix. Serious overdosing of SINTA will generally produce a reduction in workability and an increase in the cohesiveness of the mix.



### **Addition Rates**

The performance of SINTA is best assessed after preliminary trial mixtures both in the laboratory and on site, using the actual mix constituents under consideration to determine the effect on concrete properties.

# As a guide to trials, a dosage level of 0.6 kg SINTA per m³ is recommended.

For advice and assistance with trials we recommend that you consult GCP Applied Technologies.

## Compatibility

#### With Cements:

SINTA can be used with all types of cement, including limestone cement. It is also effective in concrete containing fly ash or ground granulated blast furnace slag.

For use with special cements we recommend you to contact GCP Applied Technologies.

#### With Other Admixtures:

SINTA should not be pre-mixed with other admixtures.

The performance of the material may be affected by the presence of other chemicals and we would recommend that GCP be consulted in such circumstances.

## **Dispensing**

SINTA is available in convenient concrete dispersible bags which are added, unopened, to the truck or central mixer.

## **Health and Safety**

For further information on Health and Safety matters regarding this product we recommend that you consult the relevant Safety Data Sheet from GCP Applied Technologies.

In line with general chemical handling precautions avoid contact with skin or eyes and protective gloves/goggles should be worn.

## **Packaging**

SINTA is available in 0.6 kg concrete dispersible bags. All bags are supplied overpacked in cardboard boxes.

## **Storage**

SINTA requires no special storage facilities under normal winter conditions

#### **Technical Service**

Our Technical Service department of GCP Applied Technologies is available to assist you in the correct use of our performance chemicals.

### gcpat.com | Customer Service: Tel: 01925 855330 Fax: 01925 855350

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