# **Alpha Calcit Application Leaflet**



## ALPHA TALC® CT X FOR PLASTICS

### **Product Properties**

**ALPHA TALC CT X** product family are functional white industrial minerals with the possibility to significantly modify several properties of polymers, plus cost reduction potential. Due to special procedure, the natural lamellarity of the talc is kept. The application of this material leads to modified polymers by maximisation of their mechanical performance. Addition of **ALPHA TALC CT X** helps to save cost through reduction of polymer amount in compounds. Application of this industrial mineral enhances important mechanical (rigidity, tensile strength, shrinkage etc.) and thermal properties of polymers (PP, PA). The talc addition plays an important role in various applications e.g. in automotive uses: instrument panels, consoles and grills with improvement of the impact resistance and lowering of the thermal expansion of the end-products.

# UNIVERSAL PERFORMER FOR POLYMERS

### Key Benefits at a glance

- Broaden application spectrum in polymers
- Increasing of the mechanical stability
- Excellent rheological properties
- Exceptional rigidity of the compounds
- Reduction of the permeability
- Reduction of cost due to optimal properties
- Enhancement of thermal properties



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## ALPHA TALC® CT P FOR PAINTS

### **Introduction**

Due to platy-shaped particles, **ALPHA TALC CT X** acts as industrial mineral in plastics with improvement of the useful properties of the filled material due to formation of bonding between talc particles and polymers. The addition of talc increases the tensile strength, reduces shrinkage and improves the dimensional stability and rigidity of compounds during employment.

### Mineralogical composition

Talc:	~ 95 %
Magnesite / Dolomite / Chlorit	< 3 %
Accessory minerals	~ 2 %

Loss of ignition (LOI<sub>1000 °C</sub>) 6.5 %

#### **Chemical and Physical Data**

Product	D50 [μm]	Sieve residue [%]	Whiteness Ry	BET
ALPHA TALC CT 30 X	6.0	63 µm < 0.1	90	10
ALPHA TALC CT 45 X	6.0	71 µm < 0.1	90	10

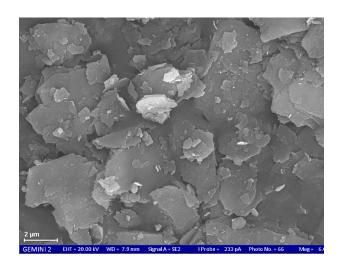
### **Application examples**

#### **Plastic compounds:**

- Improvement of rigidity
- Increase of tensile strength
- Improvement of thermal properties
- Reduction of shrinkage

#### Plastic components:

- High impact resistance
- Development of stiffness
- Improvement of dimensional stability
- Enhanced reinforcing properties
- High filling degree of end-product



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D-50971 Köln Postfach 50 11 06 D-50997 Köln Otto-Hahn-Str. 9-11 Telefon: +49 2236 8914-0 Telefax: +49 2236 40644 Email: info@alpha-calcit.de Internet: www.alpha-calcit.de

