



PRODUCT-INFORMATION

1. Product Name

MECHANO-CAP[®] 1P1

2. Product Description

MECHANO-CAP[®] 1P1 is a very pure, spherical natural graphite with a high bulk and tap density. The production is made according to the method of mechano-design. This enables an easy access to the basal planes resulting in fast intercalation and deintercalation. MECHANO-CAP[®] 1P1 shows a very high tap density and a low specific surface. In lithium ion batteries undesired surface reactions caused by electrolytes are reduced in this way. In many cases a surface coating is not necessary and thus a considerable cost saving can be achieved.

3. Application

- Anode graphite for lithium ion batteries
- Improvement of thermal and electrical conductivity in polymer systems
- Synergistic effects with other graphite or synthetic materials like MCMB's
- Production of extremely high packing densities and solid matter concentrations
- Very easy incorporation in elastomers when using kneaders
- Lubricants with extremely high compression resistance

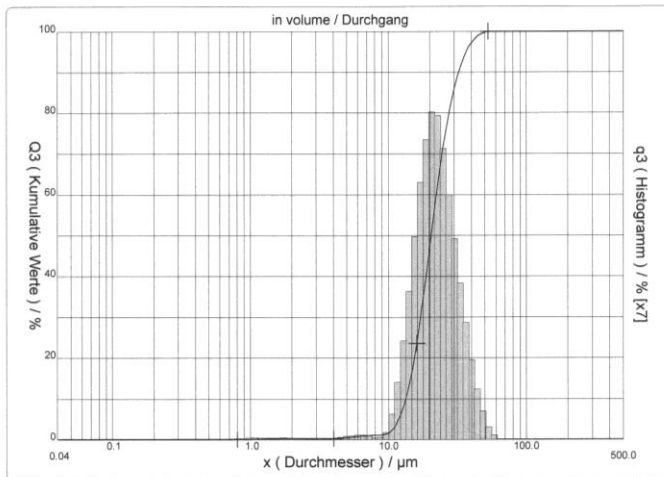
4. Specification

Property	Specification	Unit	Method
Carbon	>99.0	weight-%	DIN 53903 110°C
Moisture	max. 0.5	weight-%	drying
Particle size D ₅₀	23-26	µm	laser diffraction
Particle size D ₁₀	8-12	µm	laser diffraction
Particle size D ₉₀	38-45	µm	laser diffraction
Spec. surface area	5	m ² /g	BET
Tap density	950	g/l	home method
Functionalisation	-	-	n.a.

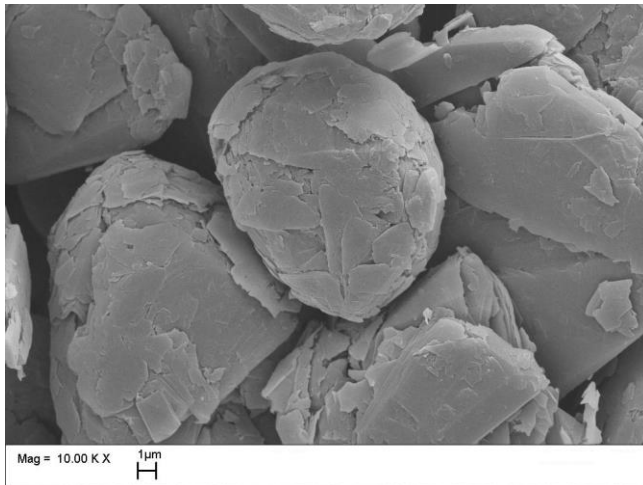


PRODUCT-INFORMATION

5. Typical particle size distribution



6. Typical particle shape





PRODUCT-INFORMATION

7. Purity

Element	Quantity
Fe	≤50 ppm
Cu	≤1.5 ppm
Ca	≤60 ppm
Al	≤25 ppm
Mg	≤25 ppm
Pb	≤5.0 ppm
Na	≤55 ppm
Mo	≤3.0 ppm

Information provided on this technical data sheet indicates the approximate physical and chemical properties of the material. No warranty is made either expressed or implied regarding the accuracy or the results to be obtained from the use of such information.