



PRODUCT-INFORMATION

1. Product Name

MECHANO-COND[®] 1

2. Product description

MECHANO-COND[®] 1 is a very pure partly delaminated natural graphite. MECHANO-COND[®] 1 shows an outstanding platelet structure and a high aspect ratio. MECHANO-COND[®] 1 is highly electrical and thermal conductive and shows an excellent lubricating effect. It is compatible with a wide range of lacquer formulations as well as with polymer systems like thermoplastics or thermo setting resins. MECHANO-COND[®] 1 can be used in the negative Plate of lead-acid-batteries together with MECHANO-COND[®] 5VP3.

3. Applications

- Reduction of friction coefficient
- Improvement of thermal and electrical conductivity
- Synergistic effects with other lubricants like tungsten disulphide, molybdenum disulphide, hexagonal boron nitride and PTFE
- Coatings and lacquers
- Battery systems as conductive material in alkaline manganese batteries, as spacer and conductive additive in lead acid batteries to improve the cycle life and for battery can coating
- Corrosion protection reduction of permeation coefficient
- Reinforcement of plastic

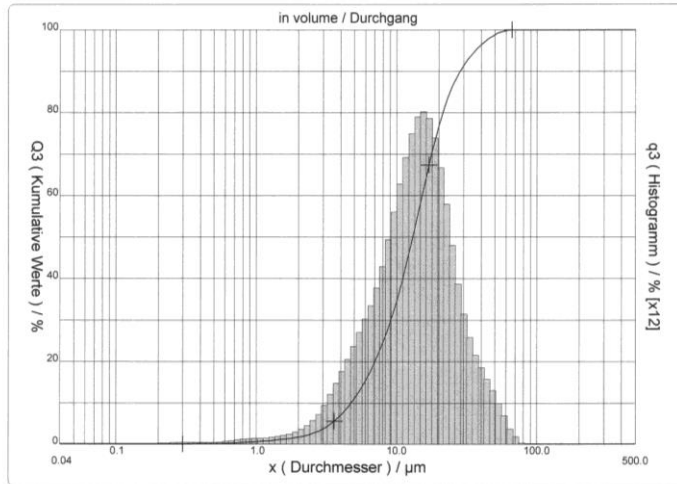
4. Properties

Property	Specification	Unit	Method
Carbon	>99,0	Wt. %	DIN 51903
Moisture	max. 0,5	Wt. %	110°C Drying
Particle size D ₅₀	12-15	µm	Laser diffraction
Particle size D ₁₀	4-6	µm	Laser diffraction
Particle size D ₉₀	27-30	µm	Laser diffraction
Specific surface area	12	m ² /g	BET
Bulk density	320	g/l	Home method
Functionalizing		-	n.a.

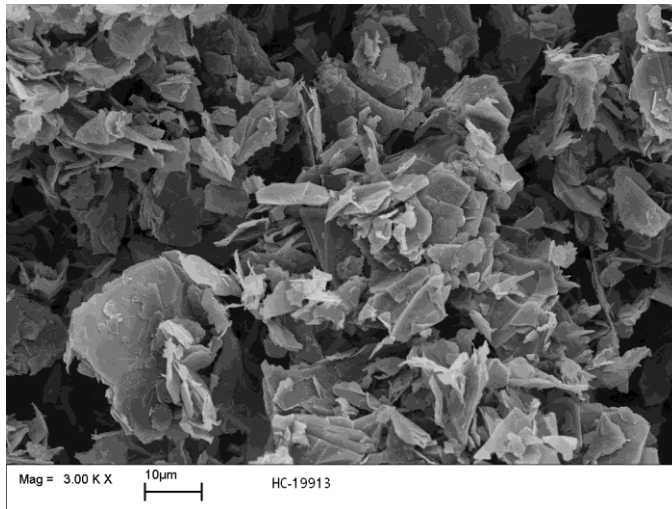


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5. Typical particle size distribution



6. Typical particle shape



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.