H.C. CARBON GmbH

Ziegelstrasse 7
91126 Rednitzhembach
Tel.: +49 (0)911/475859-0
Fax: +49 (0) 911/475859-49
www.hc-carbon.de

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® 1can be used in the negative Plate of lead-acid-batteries together with MECHANO-COND® 5P2.

3. Applications

- Reduction of friction coefficient
- Improvement of thermal and electrical conductivity
- Synergistic effects wit other lubricants like tungsten disulphide, olybdenum disulphide, hexagonal boron nitride and PTFE
- Coatings und 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

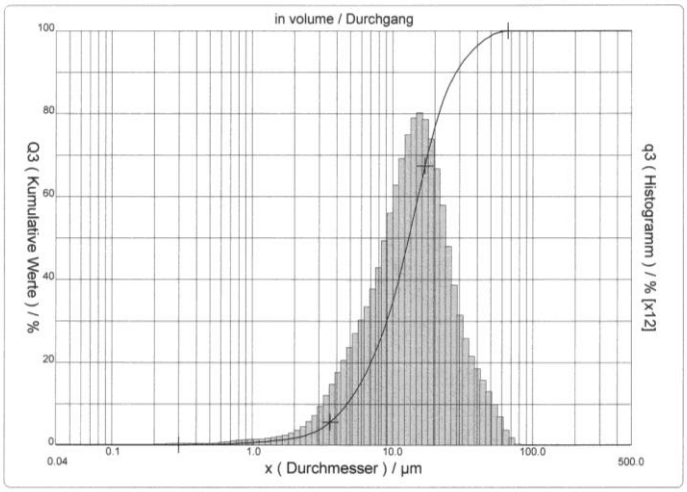
Property	Specification	Unit	Method
Carbon	>99,0	Wt. %	DIN 51903
Moisture	max. 0,5	Wt. %	110°C Drying
Particle size D_{50}	12-15	µm	Laser diffraction
Particle size D_{10}	4-6	µm	Laser diffraction
Particle size D_{90}	27-30	µm	Laser diffraction
Specific surface area	12	m^2/g	BET
Bulk density	320	g/l	Home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

H.C. CARBON GmbH

Ziegelstrasse 7
91126 Rednitzhembach
Tel.: +49 (0)911/475859-0
Fax: +49 (0) 911/475859-49
www.hc-carbon.de

PRODUCT-INFORMATION

5. Typical particle size distribution



6. Typical particle shape