

Bundesministerium für Bildung und Forschung

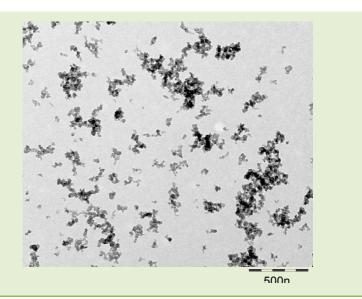
## Material

## **Carbon Black**

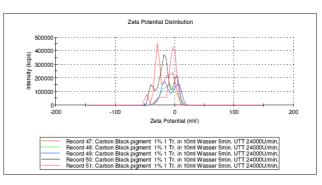
Charge description / NanoCare product number	CH-000122 2
Provider	Evonik Degussa
Available form	Powder
Primary particle size [d <sub>90</sub> in nm]	16 nm
Particle size distribution	7 – 43 nm
рН	-
BET Surface area	339 +/-6 m²/g
BET Surface area Particle morphology	339 +/-6 m <sup>2</sup> /g Primary particles are connected by chemical bond and form large solid aggregates, because of Van-der Waals-Forces aggregates form micrometer sized agglomerates
	Primary particles are connected by chemical bond and form large solid aggregates, because of Van-der Waals-Forces aggregates form micrometer sized
Particle morphology	Primary particles are connected by chemical bond and form large solid aggregates, because of Van-der Waals-Forces aggregates form micrometer sized agglomerates
Particle morphology Crystal phase and crystallinity	Primary particles are connected by chemical bond and form large solid aggregates, because of Van-der Waals-Forces aggregates form micrometer sized agglomerates

**Purity/contamination** 

TEM-micrograph of a Carbon Black dispersion after destruction of the agglomerate structure by sonication



Bundesministerium für Bildung und Forschung nan@are Results Mean (mV) Area (%) Width (mV) Zeta Potential (mV): -9,66 Peak 1: -1,67 73,9 4,05 Zeta Deviation (mV): 14,5 Peak 2: -22,8 16,7 5,94 Conductivity (mS/cm): 0,0198 2,97 Peak 3: -47,1 9,3



Zeta potential (in water)

Oberflächenchemie

GEFÖRDERT VOM