

## ACTIVATED CARBON NANOWPOWDER - CS

We produce tailored & application specific nanomaterials to the specifications and needs of our customers to improve their products & solutions with the highest quality (3N – 5N), specialized in high surface areas and at the most competitive price & highest sustainability in the market through our own proprietary production process that is patented and unique in the industry and without chemicals.

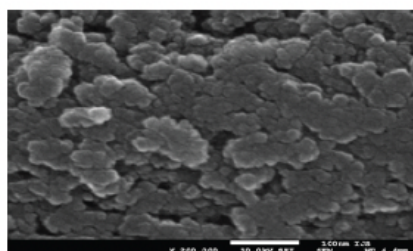
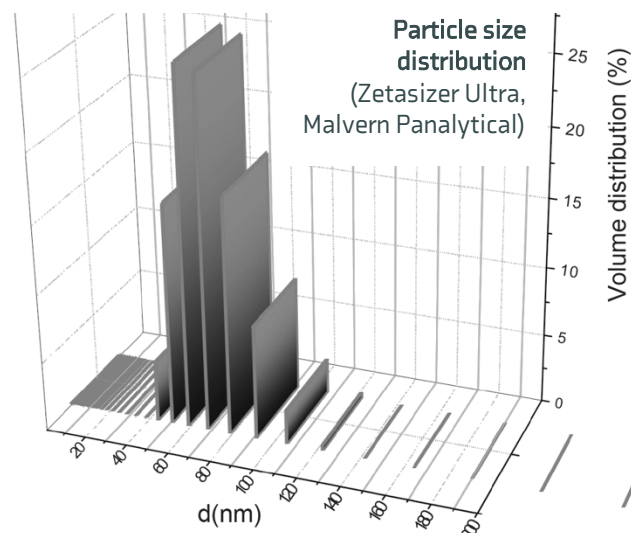
### EXTENSIVE CHARACTERISATION DATA

To ensure uncompromised product quality, each particle batch is analysed and characterized using the latest quality control techniques including dynamic light scattering (DLS), scanning electron microscopy (SEM), transmission electron microscopy (TEM) and Brunauer-Emmett-Teller (BET) analysis. A specific quality control certificate will accommodate every batch. Additional customer-specific characterization requirements can be agreed upon.

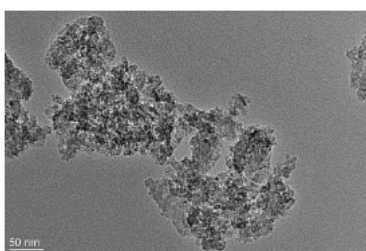
The below is just an example of many different types of **Activated Carbon Nanopowders** and materials we can produce for our customers.

### MATERIAL CHARACTERISTICS

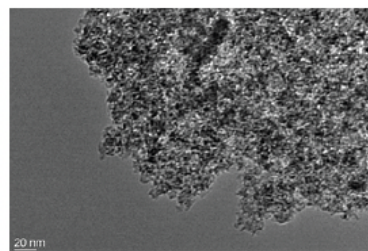
Chemical name	Activated Carbon
Formula	C
Molecular weight	12.01 g mol <sup>-1</sup>
Physical state	Solid
Appearance (Form)	Powder
Appearance (Color)	Black
Purity	99%
Particle size	70 nm
Pore size (BET)	4 nm
Surface area (BET)	1211 m <sup>2</sup> g <sup>-1</sup>
Zeta potential	-30 mV
Capacitance	17.8 F g <sup>-1</sup>
Polydispersity index (PI)	0.4
pH	5.3



SEM image (JEOL JSM 7600F)



TEM image (JEOL JEM 2010F)



TEM image (JEOL JEM 2010F)

### CUSTOMER CENTRIC SERVICE

Our nanoparticle experts will address your technical questions and help you select the optimal nanomaterial for your application which gets produced for your application in our lab & production facility for your validation and subsequent series production.

### APPLICATIONS

- Supercapacitors
- (Redox flow) Batteries
- Biosensors
- Bio-filtering material
- Chemicals/ Therapeutics carrier
- Water & Gas purification
- Etc.