

ALUMINIUM FLAKE NANOPOWDER

The Aluminium Flake Nanopowder is a state-of-the-art nanoparticle material, characterized by its unique structure and particles in nanometer dimensions. Its distinguishing attributes stem from its high surface area to volume ratio, resulting in enhanced properties compared to traditional, larger-scale aluminium. This nanopowder's exceptional physical and chemical characteristics have led to its broad application in various industries. The key applications and uses include but are not limited to: Composite Materials / Conductive Inks and Coatings / Thermal Interface Materials / Energetic Materials/ Catalysis / Paints and Coatings/Battery Technology / Rocket Fuel

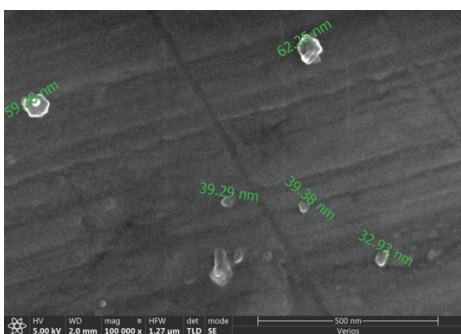
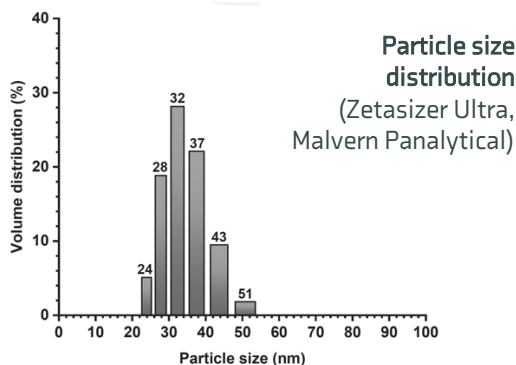
EXTENSIVE CHARACTERISATION DATA

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.

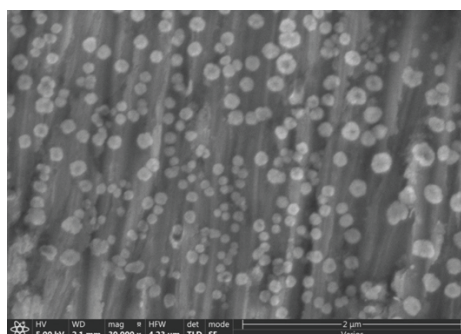
The below is just an example of many different types of **Nano Aluminium Flake Powder** and materials we can produce for our customers, also much below that size.

MATERIAL CHARACTERISTICS

Chemical name	Aluminum Flake
Formula	Al
Molecular weight	26.98 g mol ⁻¹
Physical state	Solid
Appearance (Form)	Powder
Appearance (Color)	Silvery
Purity	99%
Particle size	32 nm



SEM image (Verios G4 XHR SEM)



SEM image (Verios G4 XHR SEM)

APPLICATIONS

- Space application – anticorrosion/infrared radiation protection
- Very effective energy source
- Fuel cells and batteries
- Exothermic applications
- Thermal & electrical conductivity
- Enhancement in plastics
- Pigments and coatings industries - anticorrosive treatments
- Rocket Fuel