

Nanoparticulate Activated Carbon

Code: UNP

About the product

UNP is a high-performance powdered activated carbon derived from high-hardness, high-purity coconut shell. Using gentle wet milling and spray-drying, the particles are refined to an average size of 300 nm (D50 = 394 nm). Its spherical morphology reduces contamination risk, making it ideal for advanced materials, biomedical research, and next-gen technologies.

FEATURES

High Surface Area Nano-Powder

Milled to ~300 nm with a BET surface area of 1354.5 m²/g for superior surface reactivity.

Gentle Wet Milling

Maintains the carbon's adsorption and chemical stability by avoiding structural damage.

Clean Drying Process

Spray-drying removes moisture while minimizing contamination through high-temperature vortex flow.

High Purity

Engineered to meet purity demands in advanced material and life science fields.

PRODUCT PROPERTIES

| | | | |
|----|-------------------|--------------------|------------------|
| 1 | Shape | — | Powder |
| 2 | Material | — | Coconut shell |
| 3 | Activation Method | — | Steam Activation |
| 4 | Catalyst | — | - |
| 5 | Iodine number | mg/g | 1,000 < |
| 6 | Moisture content | % | 10 > |
| 7 | Total ash content | % | 1 > |
| 8 | Surface area | m ² /g | ca.1,300 |
| 9 | Pore volume | cm ³ /g | ca.0.477 |
| 10 | Apparent density | g/cc | ca. 0.37 |
| 11 | pH | — | 7-9 |
| 12 | Particle size | μm | ave.0.3 |

APPLICATION

New Material Development

Used as functional fillers, conductive agents, or dispersion aids in composites and precision processing.

High-Performance Coatings

Suitable for uniform thin films and electronic material applications due to fine particle dispersion.

HEALTH AND SAFETY

Review all relevant health and safety information before using this product. For complete health and safety information, refer to the Safety Data Sheets.

PACKING

Paper bag or Carton