

# Nickel Catalyst Activated Carbon

Code: NI

## About the product

NI is a functional activated carbon utilizing high-surface-area coconut shell-based material impregnated with nanoscale nickel (Ni) particles. Leveraging the catalytic properties of nickel, it delivers high performance in hydrogenation and various chemical reaction processes involving organic compounds.

### FEATURES

#### High Catalytic Activity

Nickel, as a transition metal, exhibits a reactive electronic structure that enables efficient catalysis, particularly in hydrogenation reactions.

#### Nanoparticle Dispersion

Uniform loading of nickel at the nanoscale enhances both reaction rate and catalyst durability, improving operational efficiency by approximately 30%.

#### High-Quality Activated Carbon Base

The large surface area of coconut shell activated carbon maximizes gas-solid contact, improving reaction efficiency and adsorption performance.

#### Enhanced Durability

Offers excellent structural stability and resistance to heat and chemicals, ensuring long service life under demanding conditions.

### PRODUCT PROPERTIES

1	Shape	—	Granular
2	Material	—	Coconut shell
3	Activation method	—	Steam Activation
4	Catalyst	—	Nickel
5	Iodine number	mg/g	600 <
6	Moisture content	%	15 >
7	Total ash content	%	5 >
8	Surface area	m <sup>2</sup> /g	ca.690
9	Pore volume	cm <sup>3</sup> /g	ca.0.032
10	Apparent density	g/cc	ca. 0.65
11	pH	—	6-8
12	Particle size	—	US 20×50 mesh

### APPLICATION

#### Gas Purification

Effective in the removal of harmful gases and volatile organic compounds (VOCs).

#### Hydrogenation Catalyst

Suitable for catalytic hydrogenation processes in industrial chemical synthesis.

### 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** 20kg paper bag