

# Type 255 Nickel Powder



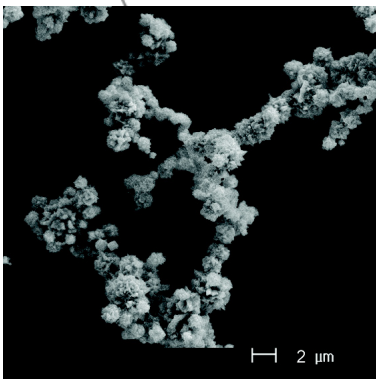
Ni

## Type 255 Nickel Powder

A fine, high purity, filamentary powder made by Vale Inco carbonyl technology.

- Three-dimensional filamentary or “chain-like” structure
- Sinters readily to form a conductive, open porosity network
- Chains can be broken down into fine primary particles for PM applications, in particular metal binder applications

**T255 is recognized by the battery and fuel cell industry as the worldwide standard for the production of porous electrodes by sintering:**



- Reproducible particle size and density provides well controlled porosity in sintered electrodes and other porous structures
- Porosity – strength relationship of sintered T255 is well understood, enabling tailoring of porous structure properties.

## T255 is widely used as a conductive additive:

- In batteries and fuel cells
- As a pigment in coatings, especially for EMI shielding applications
- To provide electrical conductivity to polymers for electronic applications

Vale Inco has reliably supplied the battery industry with Ni powder for decades. All of our powders are produced in ISO 9001 qualified refineries. Each batch can be tracked from refinery to finished product.

For more information please visit our website ([www.valeinco.com](http://www.valeinco.com)) or contact a regional sales representative.



Clydach Nickel Refinery, Wales

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## Specifications

	Typical (Wt %)	Maximum (Wt %)
Carbon	<0.20	0.25
Sulphur	<0.0005	0.001
Oxygen	<0.12	0.15
Nitrogen	<0.02	--
Iron	<0.0075	0.01
Cobalt	<0.0001	--
Total Other Elements	<0.001	--
Nickel	balance	--

## Typical Physical Characteristics:

Fisher Sub-Sieve Size:	2.2 - 2.8 μm
Bulk Density:	0.50 - 0.65 g/cm <sup>3</sup>
Specific Surface Area:	~ 0.7 m <sup>2</sup> /g

## Packaging

- 75 kg steel drum; one drum per pallet; strapped