



T255™ Nickel Powder (Standard Grade)

T255™ is a high purity nickel powder with a fine, three-dimensional filamentary (“chain-like”) structure. T255™ is produced by a unique carbonyl gas refining process at the Clydach Nickel Refinery in the UK.

T255™ is recognized as an industry standard feed for the production of sintered rechargeable battery electrodes:

- Sinters readily to form a conductive, open porosity network
- Uniform size distribution and density results in controlled porosity in sintered electrodes and other porous structures
- Porosity-strength relationship of sintered T255™ is well understood, enabling tailoring of porous structure

T255™ is widely used as a conductive additive in:

- Batteries and fuel cells
- Pigments in coatings, especially for electromagnetic interference (EMI) shielding applications
- Polymers for electronic applications to provide electrical conductivity

T255™ is also used in powder metallurgical applications, as the filamentary structure can be broken down into fine primary particles.

T255™ is produced in compliance with the following standards: ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.

For further information about our products, please visit our website (www.vale.com) or contact a regional sales representative.



75 kg drum

Typical Specifications

Form

- Fisher sub-sieve size: 2.2 - 2.8 μm
- Bulk density: 0.50 - 0.65 g/cm^3
- Sieve test: $\leq 2 \text{ wt\% } +100\#$

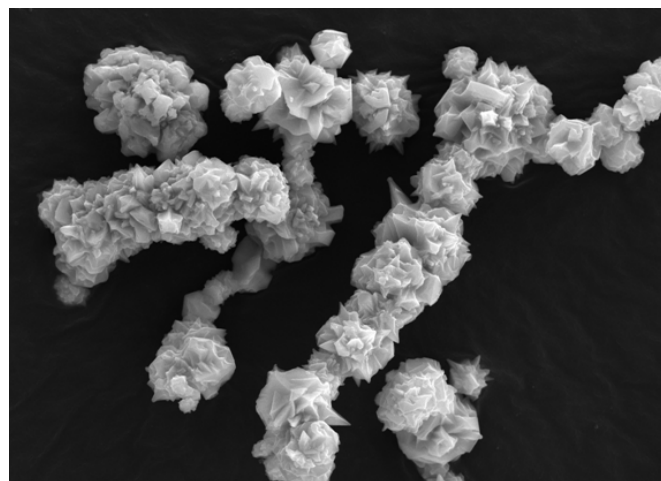
Packaging

- 75 kg steel drums, 6 or 12 drums per pallet

Chemical Analysis (wt %)

| | Typical | Max |
|-----|----------|-------|
| Ni* | >99.7 | -- |
| Co | <0.00005 | -- |
| C | <0.2000 | 0.25 |
| Fe | <0.0030 | 0.01 |
| S | <0.0002 | 0.001 |
| O | <0.0750 | 0.15 |
| N | <0.0100 | -- |

*Nickel determined by difference.



High resolution SEM image of T255™ nickel powder