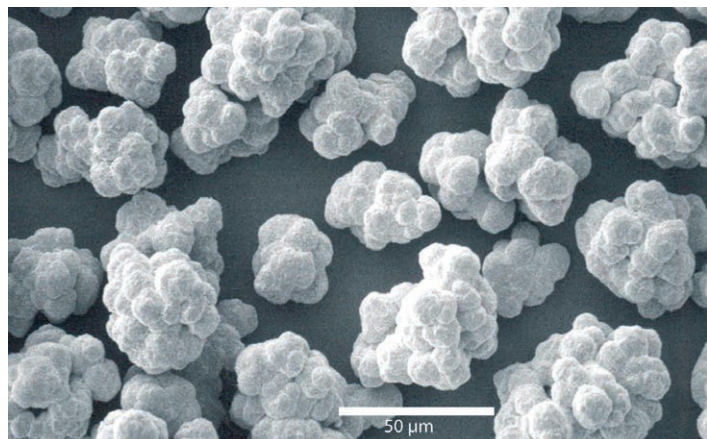


## E-Fill 1231 Conductive Grade Autoclaved Nickel Powder

Oerlikon Metco has been making consistent high quality metal powders for over 35 years. The high purity product is free of contaminants usually found in pyrometallurgy. This material is ideally suited for use in electronic applications as a base additive or as core material for further coating. The powder's spheroidal shape and pebbly surface offers an excellent balance between conductive and rheology characteristics.

Oerlikon Metco's pressure hydrometallurgical production method produces powders by building them up layer by layer ensuring a consistent and controllable particle shape and surface morphology.

Our highly controllable production method coupled with our extensive sizing and blending operations ensures each and every lot will surpass your particle distribution requirements.



SEM micrograph showing typical size, shape and surface morphology of SF Nickel Powder

### Chemical Analysis

Component	Specification wt. %
Nickel + Cobalt	99.6 min.
Cobalt	0.15 max.
Copper	0.02 max.
Iron	0.05 max.
Sulphur	0.03 max.
Carbon	0.15 max.

### Laser Diffraction Analysis

	Typical Value Microns (µm)
D10	30 ± 5
D50	40 ± 5 (µm)
D90	55 ± 5 (µm)

### Tyler Screen Analysis

Parameter	Effective Opening (µm)	Specification (wt. %)
+270	+63	3 max.
-270 +325	-63 +45	15 max.
-10 microns*	-10*	5 max.

\* Measurement by Laser Light Diffraction (Microtrac)

### Additional Information

Apparent Density Hall (ASTM B212)	3.2 to 3.5 g/cm <sup>3</sup> typical
Standard Packaging	25 kg net in plastic pails