# Nickel P- Pellets ${ }^{\text {"'" }}$ (Canada) 

Nickel P-Pellets ${ }^{\text {m" }}$ are a high purity form of nickel widely used for electroplating with titanium anode baskets. P-Pellets"' are produced by a unique carbonyl gas refining process at the Copper Cliff Nickel Refinery in Sudbury, Canada.

The controlled and consistent purity of P-Pellets ${ }^{\text {t" }}$ and the advantages associated with its distinctive shape make this product ideal for general purpose plating with titanium anode baskets:

- Carbonyl refining produces the purest form of nickel available
- Unique shape prevents the formation of bridges and voids in the basket
- Settles uniformly in basket, ensuring uniform current density and high quality deposits
- Flows easily into regular and shaped baskets with standard mesh sizes
- Ideal for use with automated basket loading devices
- Safe to handle (no sharp edges)
- Dissolves at $100 \%$ anode efficiency in common nickel plating solutions (containing chlorides)
- Carbon intensity is $7.3 \mathrm{tCo}_{2} \mathrm{e} / \mathrm{t}$ Ni. This calculation includes scopes 1 and 2 , as well as upstream scope 3 emissions.
Dissolution produces a small amount of metallic residue which can be contained using cloth anode bags.
P-Pellets"' are produced in compliance with the following ISO standards: ISO 9001:2015.

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


10 kg bags,
5 bags per box, 20 boxes per pallet


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## Product Description

Form

- Spherical pieces of nickel
- Diameter: approximately 8 - 12 mm


## Packing Density

- Approximately $5.3 \mathrm{~g} / \mathrm{cm}^{3}$ of basket capacity

Packaging

- 10 kg bags, 5 bags per box, 20 boxes per pallet (1,000 kg net weight)
- 1tonne bulk bags

Typical analysis (wt \%)

| $\mathrm{N}{ }^{*}$ | $>99.98$ |
| :--- | :--- |
| Co | $<0.00002$ |
| Cu | $<0.00004$ |
| C | $<0.007$ |
| Fe | $<0.0006$ |
| S | $<0.0001$ |
| Pb | $<0.000002$ |
| Zn | $<0.00002$ |

* Nickel determined by difference.


[^0]:    Disclaimer: The product descriptions and specifications contained in this document are made in accordance with our analyses and the methods used to produce Vale's nickel products. While these descriptions and specifications are reflective of normal production lots, rather than each individual piece, such descriptions and specifications shall in no event be deemed or interpreted as any representation, warranty or commitment by Vale in connection with Vale's nickel products quality. Vale's nickel products quality shall be determined only in accordance with the corresponding contract terms for each transaction agreed between Vale and Vale's customer and the quality related certificate issued under such contract.

