



# Electrolytic Cobalt Rounds

## Long Harbour Alloy Grade

Vale Electrolytic Cobalt Rounds are a high purity, primary form of the metal produced by electrowinning. The unique button-shape makes this product safe, convenient to handle and easy to transfer from drums.

Vale Electrolytic Cobalt Rounds are used wherever a high-purity form of cobalt is required; for example, in the production of cobalt-based superalloys. Cobalt is an important constituent of alloys with high temperature performance, corrosion resistance properties and a critical component of a wide variety of magnetic alloy and hard metals.

Vale Electrolytic Cobalt Rounds are also used in the manufacture of cobalt-containing salts, such as cobalt sulfate and cobalt nitrate. Cobalt is often an important constituent of ceramics and related materials. Electrolytic Cobalt Rounds are also used as anode material in plating baskets for electrodepositing pure cobalt and nickel-cobalt alloy coatings for a variety of applications.

The consistent purity and convenient form of Electrolytic Cobalt Rounds are distinct advantages of this premium product.

Carbon intensity is 55.1 t CO<sub>2</sub>e/t Co, including scopes 1, 2, and 3 (upstream) emissions as of the most recent assessment year (2023)<sup>1</sup>. Carbon intensity is reassessed on a regular basis.

Quality Management Systems for the production, packaging and marketing of Electrolytic Cobalt Rounds have been registered and comply with the requirements of ISO Standard 9001:2015 and the environmental management standard ISO 14001:2015.

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



**Drum Size**  
0.002 m<sup>3</sup>  
(0.057 Cu.ft.)  
**Net product weight**  
250 kg (551 lbs)



**Pallet Dimensions**  
74 cm x 74 cm x 72 cm high  
(29 in. x 29 in. x 27 in. high)  
**Approx. Gross Weight**  
1040 kg (2293 lbs)

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.

<sup>1</sup>Independent third-party limited assurance to the general principles of ISO 14064-3 has been provided by Intertek Health Sciences Inc. Emissions allocated by economic value.

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## Product Description

### Form

- Button-shaped pieces of electrolytic cobalt, about 35 mm (1.4 in.)

### Bulk Density

- Approximately 3800 to 4200 kg/m<sup>3</sup> (240 to 260 lb/ft<sup>3</sup>).

### Packaging

- 250 kg (551 lb) steel drums;  
4 drums per pallet;  
Net weight 1000 kg

### Typical analysis (%)

|            |           |
|------------|-----------|
| Cobalt     | 99.98     |
| Nickel     | 0.005     |
| Bismuth    | <0.000002 |
| Phosphorus | <0.00002  |
| Nitrogen   | <0.0004   |
| Carbon     | <0.002    |
| Oxygen     | <0.007    |
| Copper     | <0.005    |
| Selenium   | <0.00005  |
| Hydrogen   | <0.0004   |
| Sulphur    | <0.0006   |
| Cadmium    | <0.002    |
| Iron       | <0.0030   |
| Zinc       | <0.0008   |
| Lead       | <0.0006   |