

STEEL GRADE NICKEL BRIQUETTES

Indicative Specification Sheet



Steel Grade Nickel Briquettes

Standard Packaging

250 kg net steel drums; 7.0 kg drum tare weight
6 drums per 30" x 44" pallet

2,000 kg net polypropylene bag; 3.6 kg bag tare weight
1 bag per 40" x 44" pallet

Table 1 Chemical Analysis Specifications

Element	Specification wt%	Average wt% ¹	Maximum wt% ¹
Nickel ²	99.5 Min	99.59	99.45 Min
Carbon	0.1 Max	0.07	0.10
Cobalt	0.15 Max	0.089	0.131
Copper	0.02 Max	0.001	0.012
Iron	0.02 Max	0.004	0.008
Oxygen	--	0.206	0.302
Oxygen + Nitrogen	0.35 Max	0.222	0.320
Sulphur	0.04 Max	0.028	0.04
Zinc	--	0.003	0.005

¹ For purposes of determining conformance with these specifications, an observed value shall be rounded "to the nearest unit" in the last right-hand digit used in expressing the specification limit, in accordance with the rounding method of ASTM Practice E29, for Using Significant Digits in Test Data to Determine Conformance with Specifications.

² Determined by difference (100% less C, Co, Cu, Fe, O, N, and S content) For the period from 01-Oct-2018 to 30-Sep-2020.

Table 3 Physical Description

Dimensions	40 mm x 30 mm x 18 mm
Weight	Approximately 70 g each
Form	Briquette
Bulk Density	3 500 kg/m ³

Shipped from Canada

**Table 2.³ Trace Elements
Oct. 1, 2018 – Sep. 30, 2020**

	Average wt%	Maximum wt%
Aluminum	0.00251	0.00335
Antimony	<0.00001	<0.00001
Arsenic	0.00005	0.00008
Bismuth	<0.00001	<0.00001
Boron	<0.00007	0.00020
Cadmium	0.00048	0.00079
Calcium	<0.0001	<0.0001
Chromium	0.00011	0.00025
Gallium	<0.00001	<0.00001
Indium	<0.00001	<0.00001
Lead	<0.00001	<0.00001
Magnesium	<0.00005	<0.00005
Manganese	0.00005	0.00008
Mercury	<0.00002	<0.00002
Molybdenum	0.00013	0.00091
Phosphorus	<0.0005	<0.0005
Selenium	0.00053	0.00096
Silicon	<0.0003	<0.0003
Silver	<0.00001	0.00003
Tantalum	<0.00001	<0.00001
Tellurium	<0.00001	<0.00001
Thallium	0.00002	0.00004
Thorium	<0.00001	<0.00001
Tin	<0.00001	<0.00001
Titanium	<0.00001	<0.00001
Tungsten	<0.00001	<0.00001
Uranium	<0.00001	<0.00001
Vanadium	<0.00001	<0.00001

³ The above analyses are provided for informational purposes only. A composite consisting of a sample taken from each lot produced is compiled and analyzed for the listed trace impurities on a monthly basis.