

Data Sheet

B-26-D Raw, High-Purity Beryllium Metal

Materion's B-26-D is an extremely pure, vacuum-melted cast beryllium metal. It provides high strength, excellent stiffness, low density, superior heat resistance and reflectivity. Beryllium metals are commonly used in advanced defense, industrial or space exploration applications. B-26-D is certified to conform to a minimum purity of 99.0%.

Chemical Composition (Weight Percent)

Beryllium of B-26-D specification contains a minimum beryllium content of 99.0% and conforms to the following maximum chemical limits:

Compound	Composition %
Beryllium (Be) Assay - minimum	99.0
Beryllium Oxide (BeO) - maximum	0.50
Aluminum (Al) - maximum	0.09
Boron (B) - maximum	0.0002
Cadmium (Cd) - maximum	0.0002
Calcium (Ca) - maximum	0.02
Carbon (C) - maximum	0.10
Chromium (Cr) - maximum	0.01
Cobalt (Co) - maximum	0.0010
Copper (Cu) - maximum	0.01
Iron (Fe) - maximum	0.10

Compound	Composition %
Lead (Pb) - maximum	0.002
Lithium (Li) - maximum	0.0003
Magnesium (Mg) - maximum	0.08
Manganese (Mn) - maximum	0.015
Molybdenum (Mo) - maximum	0.002
Nickel (Ni) - maximum	0.03
Nitrogen (N) - maximum	0.03
Silicon (Si) - maximum	0.06
Silver (Ag) - maximum	0.0005
Zinc (Zn) - maximum	0.02

Forms Available

B-26-D is available in cylindrical billets with the surface cleaned to remove impurities. Chips of approximately $0.040 \times 0.125 \times 0.005$ inches (1 x 3 x 0.1 mm) are also available. Irregularly shaped pieces, "lump," come in pieces 0.125" to 1.5" (3 to 28 mm) in dimension with some fines. It should be noted that BeO content will be higher in chips than in billets or lumps. For additional technical information and details, contact us at +1.800.375.4205 (+1.216.383.6800). Any custom material requirements must be agreed upon by both parties before being produced.



Related Information

Certification of compliance with this specification will be furnished upon request. When requested, actual test results will be certified. Testing in accordance with the individual customer's instructions will be performed if mutually acceptable, and actual test results will be certified.

The method of packaging, labeling and shipping will be in accordance with applicable government regulations. Special packaging will be provided when mutually acceptable and in accordance with government regulations. Each container will be legibly marked with the following minimum information: purchase order number, material specification number, material lot number, gross weight, net weight and tare weight.

Health and Safety

Processing beryllium-containing alloys poses a health risk if safe practices are not followed. Inhalation of airborne beryllium can cause serious lung diseases in some individuals. Occupational safety and health regulatory agencies worldwide have set mandatory limits on occupational respiratory exposures. Read and follow the guidance in the Safety Data Sheet (SDS) before working with this material. The SDS and additional important beryllium health and safety information and guidance can be found at <u>berylliumsafety.com</u>, <u>berylliumsafety.eu</u> and <u>Materion.com</u>. For questions on safe practices for beryllium-containing alloys, contact the Materion Product Stewardship Group at +1.800.862.4118 or contact us by email at <u>Materion-PS@Materion.com</u>.

Disclaimer:

Only the buyer can determine the appropriateness of any processing practice, end-product or application. Materion does not make any warranty regarding its recommendations, the suitability of Materion's product, or its processing suggestions for buyer's end product, application or equipment.

The properties presented on this data sheet are for reference purposes only, intended only to initiate the material selection process. They do not constitute, nor are they intended to constitute, a material specification. Material will be produced to one of the applicable industry standards, if any, listed in the Industry Standards and Specification section.

Actual properties may vary by thickness and/or part number. Please contact your local sales engineer for detailed properties to be used in simulation.

Any properties marked as preliminary are subject to change at any time as the manufacturing process is further refined.