



Beryllium & Composites
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Metallic Beryllium Containing Scrap BWA-68-Rev 3 Web

1. Scope
 - 1.1. This specification covers all purchased beryllium and aluminum-beryllium (AlBeMet) scrap used at the Elmore facility for the manufacture of beryllium, AlBeMet, or other beryllium containing products.
2. Purchasing Information
 - 2.1. The Elmore Purchasing Dept. or Beryllium Sales Dept. shall determine if there exists a need for the scrap materials offered for purchase.
 - 2.1.1. If it is determined the material should be purchased; a purchase order will be issued to the vendor. This purchase specification and revision must be called out on the purchase order.

Note: Each 8 drum quantity will be a separate line item to facilitate partial payment.
Supplier must contact Materion for "Delivery Date" (Processing capacity is 8 drums/month.
Larger shipments may extend lead times and may extend payment)

3. Chemical Composition

Scrap materials must meet the following chemical composition limits:

3.1. Solids

Element	Be	AlBeMet 162
Beryllium, wt. % min.	98.0	60.0
Aluminum, wt. % max.	0.10	balance
Iron, wt. % max.	0.15	0.2
Copper, wt. % max.	0.04	0.2
Silicon, wt. % max.	0.08	0.1
Magnesium, wt. % max.	0.08	0.2
Silver, wt. % max.	0.04	0.05
Other Metallics		
Each, wt. % max.	0.04	0.2
Total, wt. % max.	1.00	4.0

3.2. Machined Chips

Element	Class 1 Chips	Class 2 Chips	AlBeMet Chips
Beryllium, wt. % min.	97.5	55.0	35.0
BeO, wt. % max.	3.0	3.0	N/A
Aluminum, wt. % max.	0.20	40.0	Balance
Iron, wt. % max.	0.25	0.5	0.4
Copper, wt. % max.	0.10	0.5	0.4
Silicon, wt. % max.	0.15	0.5	0.2
Magnesium, wt. % max.	0.12	0.5	0.4
Silver, wt. % max.	0.04	0.05	0.05
Other Metallics			
Each, wt. % max.	0.10	0.5	0.4
Total, wt. % max.	1.00	2.0	4.0

3.3. Materion will **not** accept: Baghouse Fines, Powders, Investment Casting material, E-Material, Saw/Machine Sludges and Radioactive Material

4. Cleanliness

4.1. All material purchased under this specification must be free of contamination from other metals, plastics, cloths, paper, and other materials.

4.2. All drums of machine chips must be drained of excess cutting fluids.

5. Approved Vendors

5.1. Materion Purchasing or Sales Department may purchase material to this specification upon review of the vendor's past performance.

6. Packaging and Shipping Instructions

6.1. Non-hazardous Classification

Beryllium metal products with particle size larger than 100 micrometers are considered non-hazardous and require no special D.O.T. or IATA packaging or labeling. However, Materion Brush Inc. does require that all machine chips (wet or dry) and oily/wet solids be packaged in clean, rust free, 55 gallon, open top, metal drums with gasketed lid and lock ring retainer to prevent seepage during transit (an exact alternative 30 gallon metal drum is acceptable for smaller lots only). Drums shall not be painted inside and plastic liners shall not be used. Dry solids may be packaged in sealed fiberboard or wooden cartons provided the container is structurally sound to support the load during transit. Special precautions must be taken to assure the outside surface of all containers are clean and free of any visible particulate. Examples of such beryllium-containing material includes but is not limited to, the following:

- * Beryllium metal solids and/or chips
- * AIBeMet solids and/or chips

The Harmonized Code/Schedule B number for non-hazardous beryllium and aluminum-beryllium is 8112.11.3000.

Assistance in establishing safe packaging and shipping procedures may be obtained by contacting:

Transportation Coordinator	or	Leader Shipping & Receiving
Materion Inc.		Materion Inc.
Telephone No.: 419-862-2745		Telephone No.: 419-862-2745

6.2. Other Packaging and Labeling Requirements

- 6.2.1. The purchase order number must be listed on the outside of each drum or container.
- 6.2.2. Gross, tare (including the lid, retainer ring, etc.) and net weights should be listed on each drum. A description of the type of chips. e.g., dry beryllium, oily AIBeMet, etc., is also desired, either on the packing slip and/or the drum.
- 6.2.3. Drums should be on pallets, with a maximum of four drums per pallet.
- 6.2.4. Drums shall be labeled "SCRAP RECLAMATION" on the top lid.

7. Certification

- 7.1. The qualified supplier shipping material purchased under this specification is responsible for compliance to this specification by including the following documentation with the shipment, or by mail to arrive no later than the day of receipt of the shipment.
 - 7.1.1. A packing list including the net, tare and gross weights of the material shipped, the purchase order number, and identification of each drum or container as marked on the drum or container.

7.1.2. A Statement of Compliance signed by a responsible agent of the vendor which includes (as a minimum):

7.1.2.1. The material included in the shipment meets the requirements of this specification. The specification number and revision must be included in the statement.

7.1.2.2. The purchase order number, and if applicable, the release number.

7.1.2.3. The date of shipment.

8. Basis of Acceptance

8.1. The result of physical and/or other inspection testing, including chemical analysis, may result in the rejection of shipments in part or total. On this basis, unloading does not imply acceptance. Thorough examination of material after receipt may establish cause for rejection. Failure of the shipment, in part or total, to meet the requirements of this specification will result in material rejection, in part or total, and return of the material to the vendor. Materion may assess extra handling, testing and/or processing charges with the vendor's approval for shipments that do not comply with specification requirements.

8.2. On rare occasions, we may accept out of spec material at a lower cost on a case by case basis, if we are able to disposition in a timely manner.

8.3. Materion Brush Inc. may reject a shipment if the material appears contaminated, the shipping container is damaged, or the material was not shipped in approved containers.