

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
29 West 39th Street
New York City

AMS4825B

Issued 9-1-41

Revised 6-1-51

BEARINGS, LEADED BRONZE 74Cu - 16Pb - 10Sn Steel Back

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. TYPE: Steel back having bearing metal cast on one or both faces.

3. COMPOSITION:

3.1 Bearing Metal:

| | | | |
|----------------------|----------|-----|------|
| Copper | 70.0 | - | 78.0 |
| Lead | 13.0 | - | 18.0 |
| Tin | 9.0 | - | 11.0 |
| Iron | 0.35 max | | |
| Zinc | 0.30 max | | |
| Phosphorus | 0.01 max | | |
| Total Named Elements | 99.8 | min | |

3.2 Back: Low carbon steel, unless otherwise specified on the drawing.

4. TECHNICAL REQUIREMENTS:

4.1 General:

4.1.1 Bearing metal shall be cast from the best grades of metals, at a temperature and cooling rate which will produce the best structure for good bearing properties.

4.1.2 Bearing metal shall be firmly and continuously bonded to the back and shall be free from excessive and injurious lead segregation.

4.2 Hardness of Back: Shall be not higher than Rockwell Superficial 15N 75 or equivalent, unless otherwise specified on the drawing.

5. QUALITY:

5.1 Bearing metal and back shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to their performance.

5.2 Inspection standards and procedures shall be as agreed upon by purchaser and vendor.

6. REPORTS: Unless otherwise specified, the vendor of bearings shall furnish with each shipment three copies of a report showing the chemical composition of the bearings. This report shall include the purchase order number, material specification number, part number, and quantity.

Approved and practices recommended, are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary, and no commitment is made by the Board and its Committees will not investigate or consider suits which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against infringement of patents.