



KRN ALLOYS PVT. LTD.

PRODUCT DATA SHEET

Grade: KBP 15

Product Type: Atomized Bronze Powder
(Bronze 85/15)
Category: Atomized Non-Ferrous Powder

1. PRODUCT DESCRIPTION

Bronze 85/15 is an atomized copper-tin alloy powder developed for powder metallurgy and industrial applications requiring enhanced wear resistance, higher strength, and reliable performance under demanding conditions.

The grade is particularly suitable for components subjected to higher loads and friction, where improved durability and performance are required.

2. KEY CHARACTERISTICS

Property	Typical Value
Apparent Density	2.9 – 3.3 g/cc
Flow Rate (Hall)	22 – 30 sec/50g
Alloy Composition	Cu ~85%, Sn ~15%
Oxygen (O ₂)	≤ 0.30 %

👉 (Higher tin → slightly higher density and strength — correct behavior)

4. PHYSICAL PROPERTIES

Property	Description
Particle Shape	Irregular
Production Route	Atomized alloy powder
Compressibility	Good
Wear Resistance	High
Strength	Higher compared to 90/10

6. TYPICAL APPLICATIONS

- Heavy-duty bushes and sleeves
- Wear-resistant PM components
- Friction and load-bearing applications
- Industrial bronze parts

8. PROCESSING GUIDELINES

- Suitable for PM compaction and sintering
- Recommended for applications requiring higher mechanical strength
- Compatible with lubrication systems in bearing applications

3. CHEMICAL COMPOSITION (%)

Element	Typical (%)
Cu (Copper)	~85
Sn (Tin)	~15
O (Oxygen)	≤ 0.30
Others	Controlled within standard manufacturing limits

5. PARTICLE SIZE DISTRIBUTION (PSD)

Fraction	Typical Distribution (%)
+100 mesh (>150 µm)	0 – 2
-100 +200 mesh	10 – 20
-200 +325 mesh	45 – 60
-325 mesh (<45 µm)	15 – 25

* Particle size distribution is controlled to support uniform compaction, enhanced wear performance, and stable sintering behavior.

7. ADVANTAGES

- Higher wear resistance compared to standard bronze grades
- Improved strength for demanding applications
- Reliable performance under load and friction
- Stable compaction and sintering behavior
- Suitable for industrial and PM applications

9. PACKAGING & SUPPLY

- Standard packing:** 25 kg bags / jumbo bags
- Custom packaging available upon request

10. DISCLAIMER

Values are typical and may vary depending on processing conditions and application requirements. This information is intended as a general guide and does not constitute a strict specification guarantee. Users are advised to evaluate the material for their specific intended use.