

Primary Magnesium 99.9% – Technical Datasheet

1. Product Description

- Primary magnesium ingots supplied by AlloyOne Metal comply with GB/T 3499 and international commercial-purity specifications. The material features high purity ($\geq 99.9\%$) and controlled impurity levels suitable for alloying, die-casting, desulfurization and reduction processes.

2. Chemical Composition (max)

Al: 0.02 %–0.04 %

- *Al impurity levels may vary between 0.02–0.04% depending on producer. Both values fall within commercial 99.9% magnesium purity requirements.

Zn: 0.02 %

Mn: 0.03 %

Si: 0.05 %

Cu: 0.005 %

Ni: 0.001 %

Fe: 0.004 %

Mg: Balance

3. Physical Properties

Density: 1.74 g/cm³

Melting point: 650°C

4. Applications

Alloying for aluminum production; magnesium alloy manufacturing; desulfurization in steelmaking; reduction processes in the chemical industry.

5. Packaging & Loading

Surface Condition

Primary magnesium ingots are available in two surface conditions:

Non acid-washed

Acid-washed

Packaging Method

- Bundled on magnesium pallets
- Wrapped with plastic foil for moisture protection
- Secured with steel or PP straps
- Fresh production, free from corrosion or oxidation

Bundle Weight

- 900–1200 kg per bundle

Ingot Dimensions

- 500–620 × 120 × 70–80 mm (typical range)

Container Loading

20FT container only

Approx. 25 MT net

6. Safety Summary

Keep dry. Avoid moisture. Do not use water for magnesium fires. Use Class D dry powder extinguishers.

7. HS Code

8104.11