



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM B951 AZ91D

Standard Specification for Codification of Certain Nonferrous Metals and Alloys, Cast and Wrought

Group - Non-Ferrous Magnesium Alloy

Sub Group - ASTM B951 Codification of Certain Nonferrous Metals and Alloys, Cast and Wrought

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Casting

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|---------------|-------------------------|------------|
| Aluminium | Al % | 8.300 - 9.700 | As-Cast | |
| Zinc | Zn % | 0.350 - 1.000 | | |
| Manganese | Mn % | 0.150 - 0.500 | | |
| Silicon | Si % | 0.100 max. | | |
| Iron | Fe % | 0.005 max. | | |
| Copper | Cu % | 0.030 max. | | |
| Nickel | Ni % | 0.002 max. | | |
| Other | Ot% | 0.020 max. | | |
| Magnesium | Mg % | Balance | | |
| - | - | - | | |
| | | | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 230 min. |
| - | - | - | Yield Strength in Mpa | 160 min. |
| - | - | - | Elongation in % | 3 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | - | Hardness in HB | 63 min. |
| - | - | - | Impact in Joule | 3 min. @RT |

| Cross Reference Table | | | |
|-----------------------|----------|---------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| AZ91D | ANSI/AA | USA | Casting |
| AZ91D | SAE | USA | Casting |
| M11916 | UNS | USA | Casting |
| B94 AZ91D | ASTM | USA | Casting |
| B275 AZ91D | ASTM | USA | Casting |
| B951 M11916 | ASTM | USA | Casting |
| - | - | - | - |

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

ONE STOP SOLUTION FOR METAL PARTS