



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - ASTM B275 AZ91D

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

**Group - Non-Ferrous Magnesium Alloy**

**Sub Group - ASTM B275 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
B951 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](mailto: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.

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