



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

## Material - IS 8631 Grade 1

### Standard Specification for Copper Base Alloys for Marine Propellers

Group - Non-Ferrous Copper Alloy

Sub Group - IS 8631 Copper Base Alloys for Marine Propellers

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

Grade Belongs to the Industry - Ingot and Casting

Chemical Composition			Heat Treatment	
Lead	Pb %	0.050 max.	As Raw	
Tin	Sn %	0.100 max.		
Silicon	Si %	0.100 max.		
Magnesium	Mg %	0.050 max.		
Manganese	Mn %	1.000 max.		
Nickel	Ni %	4.000 - 5.500		
Iron	Fe %	4.000 - 5.500		
Aluminium	Al %	8.800 - 10.000		
Zinc	Zn %	0.500 max.		
Copper	Cu %	Balance		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa      640 min. Yield Strength in Mpa      - Elongation in %      13 min. Reduction of Area in %      - Hardness in HV      - Impact in Joule      -	
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
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**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.

**ONE STOP SOLUTION FOR METAL PARTS**