



## Material - PN M059

### Standard Specification for Copper and Copper Alloy Rod for Free Machining Purpose

Group - Non Ferrous Copper Alloys

Sub Group - PN M059 Copper and Copper Alloy Rod for Free Machining Purpose

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

Grade Belongs to the Industry - Rod

Chemical Composition			Heat Treatment	
Aluminium	Al %	0.100 max.	As Raw or Solution Heat Treated	
Iron	Fe %	0.400 max.		
Nickel	Ni %	0.300 max.		
Lead	Pb %	1.500 - 2.500		
Tin	Sn %	0.200 max.		
Other	Ot %	0.200 max.		
Copper	Cu %	58.500 - 60.000		
Zinc	Zn %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	360 min.
-	-	-	Yield Strength in Mpa	150 min.
-	-	-	Elongation in %	16 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HV	90 min.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
EN 12164 CuZn39Pb2	DIN	Germany	Rod
B 124 CW612N	ASTM	USA	Rod
Ms58	DIN	Germany	Rod
CZ 120	BS	British	Rod
C37700	UNS	USA	Rod
CuZn40	AFNOR NF	France	Rod
CW509L	AFNOR NF	France	Rod

**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.