

## Material: ONORM CW113C

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

**Group:** Non Ferrous Copper Alloys

**Sub Group:** ONORM CW113C 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	
Phosphorus	P %	0.003 - 0.012	As Raw or Solution Heat Treated	
Lead	Pb %	0.700 - 1.500		
Other	Ot %	0.100 max.		
Copper	Cu %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
-	-	-	Tensile Strength in Mpa	250 min.
-	-	-	Yield Strength in Mpa	180 min.
-	-	-	Elongation in %	5 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	80 - 130
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
EN 12164 CuPb1P	DIN	Germany	Rod
CuPb1P	ONORM	Australia	Rod
2.116	DIN	Germany	Rod
CuPb1P	AFNOR NF	France	Rod
CW113C	AFNOR NF	France	Rod
CuPb1P	SFS	Finland	Rod
CW113C	SFS	Finland	Rod

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)