

Technical Data Sheet

AMPCOLOY[®] 972

Rolled material



Nominal composition:

Chromium	(Cr)	1.0%
Zirconium	(Zr)	0.1%
Others		max. 0.2%
Copper	(Cu)	balance

Specifications:

EN	CW 106C	
D	DIN 44759 A 2/2	17666 W.Nr. 2.1293
F	AFNOR	UC1Zr
GB	BS	
USA	CDA RWMA	C18150, C18200, C18400 Class 2, CuCr1Zr

Mechanical and physical properties	Units	Nominal Values
Tensile strength Rm	KSI	58
Yield strength Rp 0.5	KSI	46
Elongation in 2"	%	18
Brinell hardness	BHN10	135
Rockwell hardness	HRB	76
Modulus of elasticity E	KSI	17700
Density ρ	LBS / IN ³	0.32
Coefficient of expansion α	IN / IN / °F	9.44 · 10 ⁻⁶
Thermal conductivity λ	CGS	0.765
Electrical resistivity γ (1mm ² section)	Microhms/ m	19.6
Electrical conductivity	% I.A.C.S.	86
Specific heat Cp	BTU / LB · °F	0.091

Assurances given with respect to properties or uses are subject to written approval from AMPCO METAL.

AMPCOLOY[®] 972 is a precipitation hardening copper-base alloy. In the heat treated condition, this alloy retains the mechanical properties together with a good ductility in the range of 300-500°C. High electrical conductivity and high mechanical properties are attributes of this versatile alloy.

APPLICATIONS:

- Moulds for the continuous casting of steel or aluminium
- Electrical equipment components
- Electrode beam
- Parts for the automotive industry