

### Standards

Material No.	EN Material No.	EN Designation	UNS
2.1461	CW116C	CuSi3Mn1	C65500

### Description

CuSi3Mn1 is a copper-silicon alloy for MIG-welding.

### Special properties

High temperature and corrosion resistance.

### Chemical Composition

Si ≤ %	Mn ≤ %	P ≤ %	Cu %	Al %
2.70-3.20	0.70-1.30	0.05	Rest	≤ 0.05
Fe %	Zn %			
≤ 0.20	≤ 0.40			

### Mechanical Properties 20°C

Hardness HB 30 ≤ HB	0.2% Yield strength R <sub>p</sub> ≥ N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation A <sub>5</sub> ≥ %
100	120	≥ 350	40

### Physical Properties 20°C

Density g/cm <sup>3</sup>	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical conductivity MS/m
8.5	375	35	≥ 3.5

### Application

Arc-welding (automotive industry)

### Available forms for 2.1461 / CuSi3Mn1

