

Material Title: DSM 2.4.4 / CW728R-R480

Teamcenter Reference ID:								
Mat-001483/01								
Material Short Name:								
CuZn40SiP								
Material Group:								
Copper alloy CW728R - CuZn40SiP R480								
Characteristics:								
Lead-Free Machining Brass (Pb ≤ 0.1%) With Good Machinability (~90% Vs Cuzn39pb3 = 100%). Mechanical Properties And Corrosion Resistance Are Comparable To Conventional Leaded Free-Cutting Brasses Such As Cuzn39pb3 (CW614N) And Cuzn40pb2 (CW617N). Excellent Hot Formability; Poor Cold Formability. Soft Soldering: Excellent; Hard Soldering: Good. Generally Resistant To Organic Substances And Neutral/Alkaline Media. Consider Stress Corrosion Cracking (Esp. Ammoniacal Atmospheres Under Stress) And Dezincification In Warm Acidic Waters.								
Applications:								
Typical Sectors: Sanitary / Drinking-Water Contact, Electrical Engineering, And Automotive. Supplied As Bars, Wire, Sections And Tubes (Availability By Form/Temper On Request).								
Chemical Composition:								
Si_min [%]	Si_max [%]	Cu_min [%]	Cu_max [%]	Pb_min [%]	Pb_max [%]	Zn_min [%]	Zn_max [%]	P_min [%]
0.2	0.2	59.5	59.5	0	0.1	39.85	40.15	0.15
P_max [%]								
0.15								
Properties:								
Typical Density (g/cm3)		Typical Young's modulus (MPa)		Yield Stress YS Min (MPa)		Tensile Strength TS Min (MPa)		Min Elongation (%)
8.21		107000		280		480		10
Shear Modulus (GPa)		Poissons Ratio		Typical Specific Heat Capacity (J/kg°C)		Typical Thermal Conductivity (W/(mK))		Typical Thermal Expansion (10 ⁻⁶ /K)
						104.00		
Material Safety:								
Reach - No Hazardous Element Declared RoHS - No Hazardous Element Declared								
Approved Standards:								
Material Number	Country	Material Name	Product			Standard's Name	Edition	
CW728R	EN	CuZn40SiP				EN 12164	31/10/2024	

Issue	01	02	03	04	05	06	07	08
Date	21/08/26							