



METRIC

Brass Alloy SM 2464

CuproBraz®

Comparable Standards: ISO Cu64ZnNi3
 ASTM / UNS C74400
 EN -
 JIS -

Chemical Composition

Element	Unit	Range
Copper	%	63.5 - 64.5
Nickel	%	2.5 - 3.5
Iron	%	< 0.2
Zinc		remainder

Dimensions

Nominal width	Tolerance
-50	±0.05
50 - 100	±0.075
100 - 200	±0.10
200 - 400	±0.15
400 - 600	±0.20

Nominal thickness	In steps of
0.090 - 0.250	0.005
0.250 - 0.400	0.010
0.400 - 1.000	0.050
1.000 - 2.000	0.100

Mechanical Properties

Alloy	Temper	Dimension Gauge mm	Yield Rp0,2 MPa	Tensile Rm MPa	Elongation A50 %	Hardness HV
SM 2464	before brazing	0.40-	115	350	70	70
	after brazing	0.40-	105	340	75	67



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Physical Properties

Density	kg/m ³	8500
Melting temperature	°C	>910
Specific heat	kJ/(kg °C)	0.377
Electrical conductivity	MS/m	
Electrical conductivity	IACS %	
Electrical resistivity	nΩ meter	
Thermal conductivity	W/(m °C)	
Thermal expansion 20-300°C	10 ⁻⁶ °C ⁻¹	19x
Young's modulus E	MPa	103 400

Heat Treatment

Soft annealing	650	°C Time dependent on size and volume.
CuproBraz® with OKC 600	650	°C /<15 minutes
Stress relief annealing	275 - 325	°C

Formability

Easy to form in annealed condition , however decreasing with increased hardness.

Soft annealed $0 \times t$ bending radius
 $t = \text{gauge}$

Welding **CuproBraz®**

Due to zinc content, some counter-measures to stop vaporization of zinc are necessary. Otherwise the alloy is suitable for soldering, brazing and welding.

This high temperature resistant alloy is specially suitable for furnace brazing operations and used as tank & header material in the CuproBraz heat-exchangers.



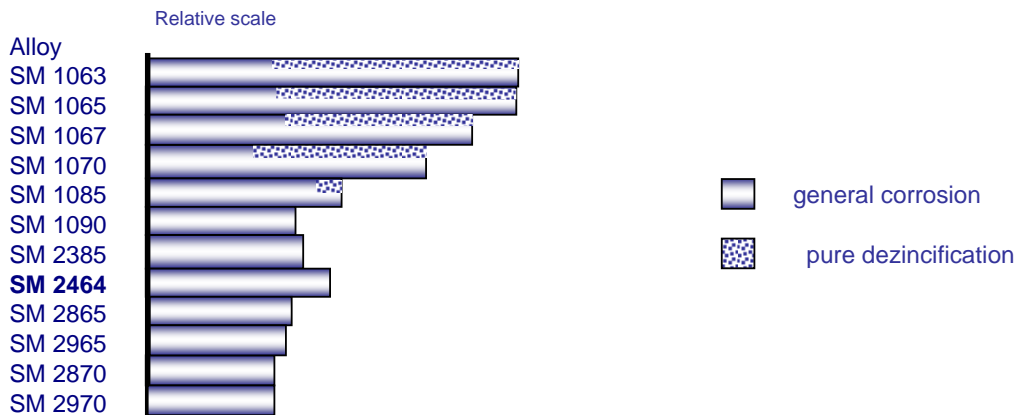
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Corrosion Properties

Durable to water and organic compounds, as well as land, sea and industrial atmospheres.

Dezincification comparison:



To minimize the risk for **stress corrosion cracking** we strongly recommend stress-relief annealing after all cold forming operations. In general the higher the copper content, the better the resistance to stress corrosion.

Surface Treatment.

Colour is yellowish but could easily be influenced by many types of surface treatments.

CuproBraz Alliance

www.cuprobraze.com

CuproBraz[®]

Luvata Sweden AB
 Box 550
 721 10 Västerås Sweden
www.luvata.com

Luvata Netherlands BV
 Postbus
 NL-7200 AA Zutphen
 The Netherlands

revision 1 feb -07
 subject to change without notice
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