

C26800 (CuZn33) 18 08 US

Comparable standards: UNS C26800 • EN CW506L • JIS C2680
 Aurubis designations: C268 • PNA227 • SM1067

Description CuZn33 is a solid solution strengthened copper alloy (brass) with around 33% zinc. Cold worked CuZn33 may be susceptible to stress - corrosion cracking in certain media as ammonia or its compounds, mercury or its compounds. A stress-relief anneal can be utilized to minimize this susceptibility. Exposure to acidic media may result in dezincification.

Composition

Cu*	Fe	Pb	Zn
[%]	[%]	[%]	[%]
64.0 - 68.5	0.05 max	0.09 max	rem.

*) Cu + sum of named elements min 99.7 %

Physical properties

Melting point	Density	Specific heat cap. at 20°C	Electrical cond.	Thermal cond. at 20°C	Mod. of elasticity	Coef. of therm exp. at 20°C
[°F] [°C]	[lb/in ³] [g/cm ³]	[Btu/lb°F] [kJ/kgK]	[%IACS] [MS/m]	[Btu/ft h °F] [W/mK]	x1000 ksi [GPa]	[10 ⁻⁶ /°F] [10 ⁻⁶ /K]
1710 932	0.306 8.47	0.09 0.38	27 16	67 116	15 103	11.3 20.3

The specified conductivity applies to the soft condition only

Mechanical properties

Temper	Tensile strength Rm [ksi] [MPa]	Yield strength Rp0.2 nominal [ksi] [MPa]	Elongation 2'' nominal [%]	Hard-ness HV nominal [-]	min bend ratio 90°		min. bend ratio 180°	
					GW	BW	GW	BW
Soft	44-61 304-421	23 159	52	70	0	0	0	0
H02	55-65 379-448	44 304	31	115	0	0	0	0
H04	68-78 469-538	57 393	12	155	0	1.5	0	1.5
H06	79-89 545-614	67 462	4	170	0.5	2.5	0.5	2.5
H08	86-95 593-655	71 490	3	185				
H10	90-99 621-683	73 504	1	210				

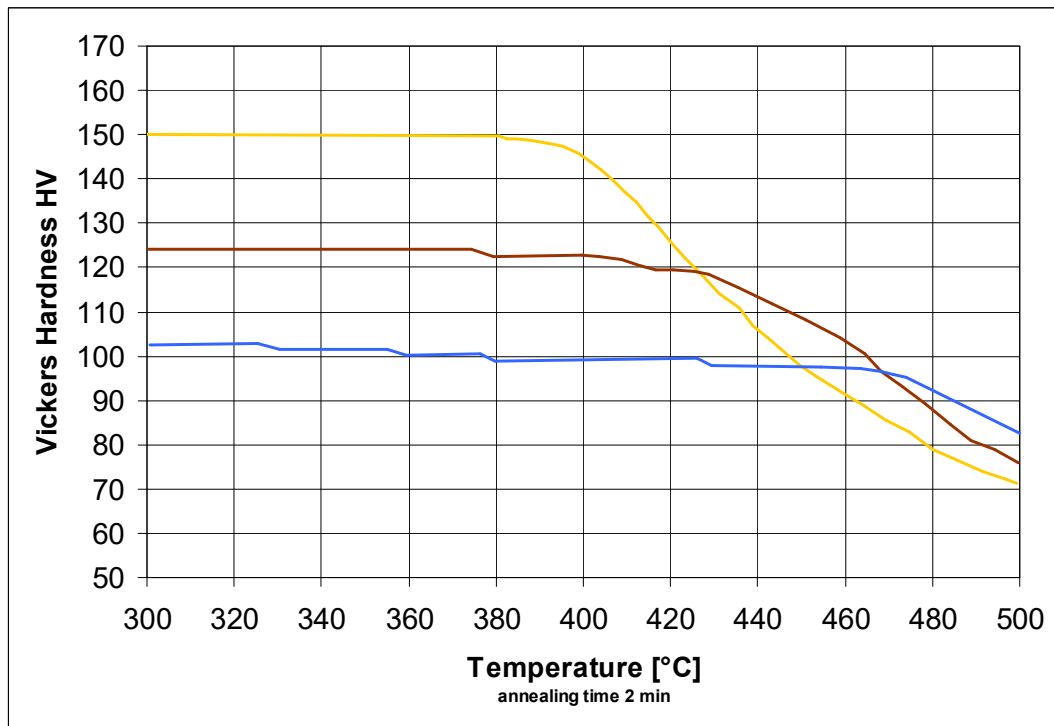
Other tempers are available upon request.
 GW bend axis transverse to rolling direction. BW bend axis parallel to rolling direction

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Fabrication properties

Soldering	excellent
Gas shielded arc welding	not recommended
Spot Welding	good
Butt Welding	good
Cold formability	excellent

Heat Resistance and Softening Characteristics

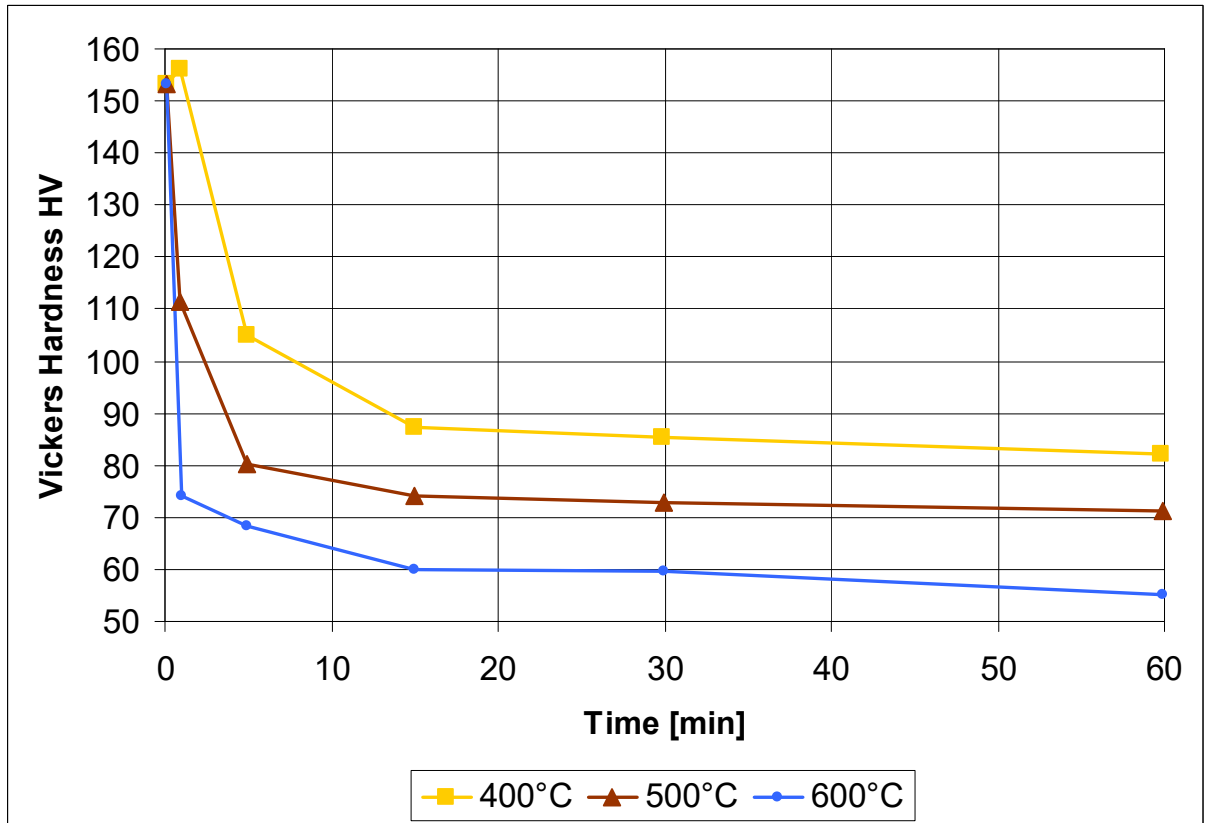


Annealing time 2 min.

Temperatures at 1 min annealing time will be 10 degrees **higher**.
 Temperatures at 4 min annealing time will be 10 degrees **lower**.

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Vickers hardness after heat treatment.



Typical uses

Electric brackets, clips & contacts; radiator cores & tanks; hollowware base metal; lamps; bowls; trays; flashlight socket shells; grommets; eyelets; fasteners; bead chain; hardware items as knobs, roses, hinges; stencils; plumbing strainers & accessories; springs; cartridge & shell cases, hose couplings, decorative pots and planters.

Applicable specifications

ASTM B36

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