

**CDA270 (Yellow Brass, 65%)****US EPA Registered Antimicrobial****Chemical Composition**

(% max., unless shown as range or min.)

	Cu	Fe	Pb	Zn
Min. /Max.	63.0-68.5	.07	.09	Rem.
Nominal	65.0	-	-	35.0

Note: Cu + Sum of Named Elements, 99.7% min.

Applicable Specifications

Product	Specification
Bolts	ASTM F468
Nuts	ASTM F467
Rod	SAE J463, J461
Screws	ASTM F468
Studs	ASTM F468
Tube	ASTM B135
Tube, Welded	ASTM B587
Wire	AMS 4712, 4713 ASTM B134 SAE J461, J463
Wire, Tinned	AMS 4710

Common Fabrication Processes

Blanking, Drawing, Etching, Forming and Bending, Heading and Upsetting, Piercing and Punching, Roll Threading and Knurling, Shearing, Spinning, Squeezing and Swaging, Stamping

Fabrication Properties

Joining Technique	Suitability
Soldering	Excellent
Brazing	Excellent
Oxyacetylene Welding	Good
Gas Shielded Arc Welding	Fair
Coated Metal Arc Welding	Not Recommended
Spot Weld	Good
Seam Weld	Not Recommended
Butt Weld	Good
Capacity for Being Cold Worked	Excellent
Capacity for Being Hot Formed	Poor
Machinability Rating	30

**Thermal Properties**

Treatment	Temp./Time - US	Temp./Time - SI
Annealing Minimum	800	427
Annealing Maximum	1300	705
Annealing Time		

Mechanical Properties (measured at room temperature, 68 F (20 C))

Temper	Section Size	Cold Work	Temp Min	Tensile Strength	Yield Strength (0.5% ext. under load)	Yield Strength (0.2% offset)	Yield Strength (0.05% offset)	Rockwell El Hardness	Vickers Hard.	Brinell Hard.	Shear Strength	Fatigue Strength*	Izod Impact Strength
	in. mm.	%	F C	ksi MPa	ksi MPa	ksi MPa	ksi MPa	% B CF 30T500			ksi MPa	ksi MPa	ft-lb J
Wire													
OS035	0.08	0	TYP68	50	-	-	-	60-	- - - -	- -	34	-	0.0
	2.0		20	345	-	-	-	60-	- - - -	- -	234	-	0.0
Flat Products													
H02	0.04	0	TYP68	61	50	-	-	2370-	- 65 -	- -	40	-	0.0
	1		20	421	345	-	-	2370-	- 65 -	- -	276	-	0.0
OS015	0.04	0	TYP68	53	22	-	-	54-	- 7843 -	- -	-	-	0.0
	1		20	365	152	-	-	54-	- 7843 -	- -	-	-	0.0
H06	0.04	0	TYP68	85	62	-	-	5 87-	- 74 -	- -	45	-	0.0
	1		20	586	427	-	-	5 87-	- 74 -	- -	310	-	0.0
OS035	0.04	0	TYP68	49	17	-	-	57-	- 6831 -	- -	34	-	0.0
	1		20	338	117	-	-	57-	- 6831 -	- -	234	-	0.0
H04	0.04	0	TYP68	74	60	-	-	8 80-	- 70 -	- -	43	14	0.0
	1		20	510	414	-	-	8 80-	- 70 -	- -	296	97	0.0
Wire													
H08	0.08	0	TYP68	128	-	-	-	3 -	- - - -	- -	60	-	0.0
	2.0		20	883	-	-	-	3 -	- - - -	- -	414	-	0.0
Flat Products													
H08	0.04	0	TYP68	91	62	-	-	3 90-	- 76 -	- -	47	20	0.0
	1		20	627	427	-	-	3 90-	- 76 -	- -	324	138	0.0
Rod													
H00	1	6	TYP68	55	40	-	-	4855-	- - - -	- -	36	-	0.0
	25.4		20	379	276	-	-	4855-	- - - -	- -	248	-	0.0
OS050	1	0	TYP68	48	16	-	-	65-	- 65- -	- -	34	-	0.0
	25.4		20	331	110	-	-	65-	- 65- -	- -	234	-	0.0
Wire													
H01	0.08	0	TYP68	70	-	-	-	20-	- - - -	- -	42	22	0.0
	2.0		20	483	-	-	-	20-	- - - -	- -	290	152	0.0
H00	0.08	0	TYP68	58	-	-	-	35-	- - - -	- -	38	-	0.0
	2.0		20	400	-	-	-	35-	- - - -	- -	262	-	0.0
Flat Products													
OS070	0.04	0	TYP68	46	14	-	-	65-	- 5815 -	- -	32	12	0.0
	1		20	317	97	-	-	65-	- 5815 -	- -	221	83	0.0
Wire													
H02	0.08	0	TYP68	88	-	-	-	15-	- - - -	- -	-	-	0.0
	2.0		20	607	-	-	-	15-	- - - -	- -	-	-	0.0
H06	0.08	0	TYP68	120	-	-	-	4 -	- - - -	- -	60	-	0.0
	2.0		20	827	-	-	-	4 -	- - - -	- -	414	-	0.0
Flat Products													
OS050	0.04	0	TYP68	47	15	-	-	62-	- 6426 -	- -	-	-	0.0
	1		20	324	103	-	-	62-	- 6426 -	- -	-	-	0.0
Wire													
H04	0.08	0	TYP68	110	-	-	-	8 -	- - - -	- -	55	-	0.0
	2.0		20	758	-	-	-	8 -	- - - -	- -	379	-	0.0
Flat Products													
H01	0.04	0	TYP68	54	40	-	-	4355-	- 54 -	- -	36	-	0.0
	1		20	372	276	-	-	4355-	- 54 -	- -	248	-	0.0
H00	0.04	0	TYP68	50	35	-	-	5050-	- 50 -	- -	-	-	0.0
	1		20	345	241	-	-	5050-	- 50 -	- -	-	-	0.0
OS025	0.04	0	TYP68	51	19	-	-	55-	- 7236 -	- -	-	-	0.0
	1		20	352	131	-	-	55-	- 7236 -	- -	-	-	0.0

*Fatigue Strength: 100×10^6 cycles,
unless indicated as [N] $\times 10^6$.

**Physical Properties**

<="" b="">	US Customary	Metric
Melting Point - Liquidus	1710 F	932 C
Melting Point - Solidus	1660 F	904 C
Density	0.306 lb/in ³ at 68 F	8.47 gm/cm ³ @ 20 C
Specific Gravity	8.470	8.47
Electrical Resistivity	38.40 ohms-cmil/ft @ 68 F	6.38 microhm-cm @ 20 C
Electrical Conductivity	27 %IACS @ 68 F	0.158 MegaSiemens/cm @ 20 C
Thermal Conductivity	67 Btu · ft/(hr · ft ² · °F) at 68 F	116.0 W/m · °K at 20 C
Coefficient of Thermal Expansion	11.30 · 10 ⁻⁶ per °F (68-572 F)	20.3 · 10 ⁻⁶ per °C (20-300 C)
Specific Heat Capacity	0.090 Btu/lb/°F at 68 F	377.1 J/kg · °K at 293 K
Modulus of Elasticity in Tension	15000 ksi	103400 MPa
Modulus of Rigidity	5600 ksi	38610 MPa

Tempers Most Commonly Used

Flat Products	
PLATE	H04, OS050
SHEET	H02, H04, OS015, OS050
STRIP, ROLLED	H00, H01, H02, H04, H06, H08, OS015, OS025, OS035, OS050, OS070
WIRE, DRAWN	H02, H04, OS050
WIRE, ROLLED	H02, H04, H08, OS050

Other	
ROD	H00, OS050
WIRE	H00, H01, H02, H04, H06, H08, OS015, OS025, OS035, OS050, OS070

Typical Uses**Architecture**

Handrails, Grillwork

Automotive

Tanks, Radiator Cores

Builders Hardware

Push Plates, Finish Hardware, Hinges, Stencils, Kick Plates, Locks

Electrical

Socket Shells, Screw Shells, Reflectors, Lamp Fixtures, Flashlight Shells

Fasteners

Grommets, Eyelets, Screws, Rivets, Fasteners, Pins

Industrial

Bead Chain, Springs, Chain

Marine

Fasteners

Plumbing

Sink Strainers, Plumbing Accessories