



Specification Sheet

Last Modified: May 27, 2017

C26800

Yellow Brass, 66%

Chemical Composition

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

	Cu	Fe	Pb	Zn
Min./Max.	64.0-68.5	0.05	0.09	Rem.
Nominal	66	-	-	34

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

Applicable Specifications

Product	Specification
Bar	ASTM B36 SAE J463, J461
Plate	ASTM B36
Rod	SAE J463, J461
Sheet	ASTM B36 SAE J463, J461
Strip	ASTM B36 SAE J461, J463
Tube, Welded	ASTM B587
Wire	SAE J461, J463
Wire, Metallizing	MILITARY MIL-W-6712

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

Millard Wire & Specialty Strip Co.

449 Warwick Industrial Drive • Warwick, RI 02886

Phone: (401) 737-9330 • Fax: (401) 737-9340



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	3

Thermal Properties

Treatment	Temp./Time – US	Temp./Time – SI
Stress Temperature		
Solution Minimum		
Solution Maximum		
Solution Time		
Solution Medium	None	
Precipitation Value		
Precipitation Time		
Precipitation Medium	None	
Annealing Minimum	800	427
Annealing Maximum	1300	705
Annealing Time		
Hot Works Minimum		
Hot Works Maximum		



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Mechanical Properties (Measured at Room Temperature, 68°F (20°C))

Temper	Section Size	Cold Work	Typ/Min	Temp	Tensile Strength		Yield Strength (0.5% ext. under load)		Yield Strength (0.05% offset)		EI	Rockwell Hardness				Vickers Hardness	Brinell Hardness			Shear Strength	Fatigue Strength	Izod Impact Strength
					F	ksi	ksi	ksi	ksi	%		B	C	F	30T		500	500	3000			
	in.	%		F	ksi	ksi	ksi	ksi	ksi	%												
	mm.			C	MPa	MPa	MPa	MPa	MPa													J
Wire																						
H06	0.08	0	TYP	68	120	-	-	-	4	-	-	-	-	-	-	-	-	-	60	-	0	
	2			20	827	-	-	-	4	-	-	-	-	-	-	-	-	-	414	-	0	
Flat Products																						
H02	0.04	0	TYP	68	61	50	-	-	23	70	-	-	65	-	-	-	-	-	40	-	0	
	1			20	421	345	-	-	23	70	-	-	65	-	-	-	-	-	276	-	0	
OS015	0.04	0	TYP	68	53	22	-	-	54	-	-	-	78	43	-	-	-	-	-	-	0	
	1			20	365	152	-	-	54	-	-	-	78	43	-	-	-	-	-	-	0	
Wire																						
H01	0.08	0	TYP	68	70	-	-	-	20	-	-	-	-	-	-	-	-	-	42	22	0	
	2			20	483	-	-	-	20	-	-	-	-	-	-	-	-	-	290	152	0	
H00	0.08	0	TYP	68	58	-	-	-	35	-	-	-	-	-	-	-	-	-	38	-	0	
	2			20	400	-	-	-	35	-	-	-	-	-	-	-	-	-	262	-	0	
Flat Products																						
H06	0.04	0	TYP	68	85	62	-	-	5	87	-	-	74	-	-	-	-	-	45	-	0	
	1			20	586	427	-	-	5	87	-	-	74	-	-	-	-	-	310	-	0	
OS035	0.04	0	TYP	68	49	17	-	-	57	-	-	-	68	31	-	-	-	-	34	-	0	
	1			20	338	117	-	-	57	-	-	-	68	31	-	-	-	-	234	-	0	
H04	0.04	0	TYP	68	74	60	-	-	8	80	-	-	70	-	-	-	-	-	43	14	0	
	1			20	510	414	-	-	8	80	-	-	70	-	-	-	-	-	296	97	0	
H08	0.04	0	TYP	68	91	62	-	-	3	90	-	-	76	-	-	-	-	-	47	20	0	
	1			20	627	427	-	-	3	90	-	-	76	-	-	-	-	-	324	138	0	
Rod																						
H00	1	6	TYP	68	55	40	-	-	48	55	-	-	-	-	-	-	-	-	36	-	0	
	25.4			20	379	276	-	-	48	55	-	-	-	-	-	-	-	-	248	-	0	
OS050	1	0	TYP	68	48	16	-	-	65	-	-	65	-	-	-	-	-	-	34	-	0	
	25.4			20	331	110	-	-	65	-	-	65	-	-	-	-	-	-	234	-	0	
Wire																						
H08	0.08	0	TYP	68	128	-	-	-	3	-	-	-	-	-	-	-	-	-	60	-	0	
	2			20	883	-	-	-	3	-	-	-	-	-	-	-	-	-	414	-	0	
Flat Products																						
OS070	0.04	0	TYP	68	46	14	-	-	65	-	-	58	15	-	-	-	-	-	32	12	0	
	1			20	317	97	-	-	65	-	-	58	15	-	-	-	-	-	221	83	0	
Wire																						
OS035	0.08	0	TYP	68	50	-	-	-	60	-	-	-	-	-	-	-	-	-	34	-	0	
	2			20	345	-	-	-	60	-	-	-	-	-	-	-	-	-	234	-	0	
H04	0.08	0	TYP	68	110	-	-	-	8	-	-	-	-	-	-	-	-	-	55	-	0	
	2			20	758	-	-	-	8	-	-	-	-	-	-	-	-	-	379	-	0	
Flat Products																						
OS050	0.04	0	TYP	68	47	15	-	-	62	-	-	64	26	-	-	-	-	-	-	-	0	
	1			20	324	103	-	-	62	-	-	64	26	-	-	-	-	-	-	-	0	
Wire																						
H02	0.08	0	TYP	68	88	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	0	
	2			20	607	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	0	
Flat Products																						
H01	0.04	0	TYP	68	54	40	-	-	43	55	-	-	54	-	-	-	-	-	36	-	0	
	1			20	372	276	-	-	43	55	-	-	54	-	-	-	-	-	248	-	0	
H00	0.04	0	TYP	68	50	35	-	-	50	50	-	-	50	-	-	-	-	-	-	-	0	
	1			20	345	241	-	-	50	50	-	-	50	-	-	-	-	-	-	-	0	
OS025	0.04	0	TYP	68	51	19	-	-	55	-	-	-	72	36	-	-	-	-	-	-	0	
	1			20	352	131	-	-	55	-	-	-	72	36	-	-	-	-	-	-	0	

*Fatigue Strength: 100 x 10⁶ cycles, unless indicated as [N]X 10⁶.



Physical Properties

Property	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	8.47	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 68F	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, Locks, Kick Plates, Hinges, Finish Hardware, Stencils



Typical Uses (cont'd)

Electrical

Socket Shells, Wire, Flashlight Shells, Clips, Lamp Sockets, Lamp Fixtures, Screw Shells, Reflectors

Fasteners

Grommets, Eyelets, Screws, Rivets, Pins, Fasteners

Industrial

Air Pressure Conveyer Systems, Bead Chain, Springs, Chain

Marine

Fasteners

Other

Plumbing Accessories, Sanitary Traps, Sink Strainers, Bathroom Fixtures

Casting Characteristics

No casting characteristics for this alloy.