



Specification Sheet

Last Modified: May 27, 2017

C27200

Yellow Brass

Chemical Composition

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

	Cu	Fe	Pb	Zn
Min./Max.	62.0-65.0	0.07	0.07	Rem.
Nominal	63.5	-	-	36.5

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

Applicable Specifications

Product	Specification
Bar	ASTM B36
Plate	ASTM B36
Sheet	ASTM B36
Strip	ASTM B36
Tube	ASTM B135
Tube, Welded	ASTM B587

Common Fabrication Processes

Drawing, Forming and Bending, Shearing, Spinning, Swaging

Fabrication Properties

No information available.

Thermal Properties

No information available.

Millard Wire & Specialty Strip Co.

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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 (0.2% offset)	Yield Strength (0.05% offset)	EI	Rockwell Hardness				Vickers Hardness	Brinell Hardness			Shear Strength	Fatigue Strength	Izod Impact Strength
					ksi	ksi	ksi	ksi		%	B	C	F	30T	500	500	3000	ksi	ksi	ft-lb
Tube																				
	in.	%		F	ksi	ksi	ksi	ksi	%	B	C	F	30T	500	500	3000	ksi	ksi	ft-lb	
	mm.			C	MPa	MPa	MPa	MPa									MPa	MPa	J	
H80	0.065	0	TYP	68	74	55	-	-	10	-	-	80	-	-	-	-	-	-	0	
	1.65			20	510	379	-	-	10	-	-	80	-	-	-	-	-	-	0	
OS025	0.065	0	TYP	68	56	23	-	-	50	-	-	82	-	-	-	-	-	-	0	
	1.65			20	386	159	-	-	50	-	-	82	-	-	-	-	-	-	0	

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

Physical Properties

Property	US Customary	Metric
Melting Point - Liquids	1680 F	916 C
Density	0.305 lb/in ³ at 68 F	8.44 gm/cm ³ @ 20 C
Specific Gravity	8.44	8.44
Electrical Conductivity	27.60 %IACS @ 68 F	0.161 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	11.40 · 10 ⁻⁶ per °F (68-572 F)	20.5 · 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

No information available.

Typical Uses (cont'd)

Fasteners

Fasteners, Fasteners

Industrial

Cold Headed Parts, Heat Exchanger Shells, Pump Cylinder Liners

Casting Characteristics

No casting characteristics for this alloy.