



**TALLADIUM, INC**

# CROWN & BRIDGE ALLOYS

Alloy	Class	Color	Precious Metal Content%				Density g/cm <sup>3</sup>	Melting Temp		Casting Temp		Yield Strength		Tensile Strength		Elongation %		Vicker Hardness		Solder
			Au	Pt	Pd	Ag		°F	°C	°F	°C	Q	H	Q	H	Q	H	Q	H	
Bio CB-77	High Noble	Rich Yellow	77	1	-	13.1	15.7	1650-1735 899-946	1910 1043	31,025	42,000	50,050	64,000	50	40	122	162	#1040		
CB-77	High Noble	Rich Yellow	77	-	1	13.1	15.7	1650-1720 899-938	1910 1043	30,000	41,000	50,000	63,000	50	41	120	160	#1040		
CB-75	High Noble	Rich Yellow	75	-	3	11	15.5	1710-1760 932-960	1890 1032	38,000	45,000	60,500	67,000	38	24	175	215	#1041		
CB-65	High Noble	Yellow	65	-	3	23	14.4	1635-1750 891-954	1860 1015	43,000	68,000	59,000	92,000	35	18	165	240	#1044		
RPD-ORY	High Noble	Yellow	63	-	3	25	14.2	1630-1750 888-954	1900 1038	34,250	85,000	50,000	110,000	39	6	168	215	#1044		
RPD-61	High Noble	Yellow	61	-	3.5	20	14.1	1616-1661 880-905	1760 960	53,400	98,800	72,200	106,500	48	14	166	252	#1044		
CB-60	High Noble	Yellow	60	-	3.5	21	14.0	1625-1720 885-938	1875 1024	43,000	68,000	59,000	92,000	35	18	165	240	#1044		
CB-52	Noble	Yellow	52	-	4.5	23	13.4	1560-1700 849-927	1850 1010	62,500	110,000	87,000	120,000	22	11	185	275	#1044		
CB-50	Noble	Yellow	50	-	4.5	29	13.0	1550-1625 843-885	1800 980	60,000	108,000	85,000	118,000	28	12	180	270	#1044		
CB-46	Noble	Light Yellow	46	-	6	39.2	12.7	1550-1680 843-916	1800 982	38,000	98,000	66,000	116,000	30	13	150	230	#1040		
CB-40	Noble	Light Yellow	40	-	5	45.5	12.4	1560-1725 851-940	1850 1010	36,000	80,050	62,000	91,000	30	14	125	215	#1040		
CB-Pd25	Noble	White	-	-	25	70	10.7	1730-1810 943-988	1960 1071	38,000	44,000	60,000	65,000	12	10	140	155	#1043		



**TALLADIUM, INC**

# CERAMIC ALLOYS

Alloy	Class	Color	Precious Metal Content (%)				CTE @ 600°C	Density g/cm <sup>3</sup>	Melting Range		Casting Temp		Yield Strength	Tensile Strength	Elongation (%)H	Vickers (MPa)	Pre-Solder	Post-Solder
			Au	Pt	Pd	Ag			°F	°C	°F	°C						
Bio-98+	High Noble	Rich Yellow	98.42	1	-	-	15.7	19.2	1895-1973°F 1035-1078°C	2200°F 1204°C	20,225	77,500	52	38	#1060	#201		
C-89	High Noble	Rich Yellow	88.5	9.5	-	-	14.7	18.7	2000-2050°F 1093-1121°C	2250°F 1232°C	74,000	88,025	11	185	#1048	#1043		
C-88	High Noble	Rich Yellow	88	9.5	-	-	14.7	18.6	1920-2060°F 1049-1127°C	2200°F 1204°C	60,500	72,500	10	180	#1046	#1041		
C-87	High Noble	Yellow	87	4.5	6	1	14.7	18.5	2100-2150°F 1149-1177°C	2300°F 1260°C	68,500	77,000	8	185	#1047	#1041		
C-86	High Noble	Rich Yellow	86	11.5	-	-	14.6	18.8	1935-2072°F 1057-1133°C	2450°F 1343°C	84,000	95,000	6	215	#1046	#1041		
C-84	High Noble	Light Yellow	84	8	5	-	14.4	18.1	2150-2225°F 1177-1218°C	2300°F 1260°C	68,500	87,025	8	221	#1047	#1041		
RPD-766	High Noble	White	76.6	9.9	9.3	1.2	14.3	18.0	2125-2300°F 1162-1260°C	2450°F 1343°C	63,000	85,000	9	210	#1048	#1043		
C-76	High Noble	White	76	-	17.4	1	14.5	16.0	1995-2220°F 1090-1215°C	2375°F 1302°C	74,500	100,000	12	245	#1046	#1043		
C-74	High Noble	Yellow	74	4	7.9	11	14.5	15.9	2085-2165°F 1140-1185°C	2300°F 1260°C	72,000	85,000	12	225	#1047	#1043		
C-66+	High Noble	White	66.5	-	24.6	-	14.4	15.2	2225-2275°F 1218-1246°C	2450°F 1343°C	79,000	115,000	15	245	#1048	#1043		
C-52	High Noble	White	52	-	38	-	14.1	14.5	2325-2375°F 1274-1302°C	2450°F 1343°C	82,000	125,000	20	255	#1048	#1043		
RPD-SFC	High Noble	White	52	-	38	-	14.0	13.5	2250-2350°F 1232-1288°C	2450°F 1343°C	85,000	115,000	18.5	225	#1048	#1043		
C-50	High Noble	White	50	-	25	19	14.5	14.1	2100-2300°F 1149-1260°C	2500°F 1371°C	51,000	74,000	7	241	#1048	#1043		
C-40	High Noble	White	40	-	40	11.5	14.5	13.0	2150-2325°F 1177-1274°C	2450°F 1343°C	83,000	115,750	20	260	#1048	#1043		
C-6	Noble	White	6	-	75	6.8	14.4	11.5	2090-2260°F 1143-1238°C	2450°F 1343°C	77,000	118,500	30	265	#1045	#1043		
C-2	Noble	White	2	-	75.86	-	14.3	11.2	2080-2285°F 1138-1252°C	2450°F 1343°C	87,000	150,000	20	300	#1045	#1043		
C-Pd80-SF	Noble	White	-	-	80	-	14.3	11.1	2165-2200°F 1185-1204°C	2375°F 1301°C	100,000	125,025	19	260	#1049	#201		
C-Pd60	Noble	White	-	-	60	28	14.8	11.2	2250-2350°F 1232-1288°C	2525°F 1385°C	51,000	75,500	20	245	#1049	#201		
C-Pd54	Noble	White	-	-	53.5	37.5	14.8	11.0	2150-2300°F 1177-1260°C	2450°F 1343°C	86,000	118,000	18	250	#1049	#201		