

ALLOYS AND THEIR USE			Content by %				MELTING RANGE °F	DENSITY g/cc	BRINELL [VICKERS]		ELONGATION %	YIELD STRENGTH PSI	ULTIMATE TENSILE PSI	RECOMMENDED SOLDERS AND THEIR FLOW POINTS
			Au.	Pt.	Pd.	Ag.								
SOFT-TYPE I For inlays subject to light stress. Maximum burnishability.	S-I *	HN	83.3		0.2	11.0	1745-1790	16.8	61	[79]	44.5	15,300	49,000	810-1600 F or Lower Fineness
	22 K *	HN	91.7			5.6	1850-1905	17.9	45	[63]	44	10,100	35,200	
MEDIUM-TYPE II For inlays, 3/4 and full crowns bridge abutments, and pontics subject to moderate stress. Burnishable.	T *	HN	82.0	4.0		7.5	1830-1885	16.3	87	[105]	36	26,200	59,400	730-1530 F or Lower Fineness
	B *	HN	76.0		2.0	14.3	1705-1770	15.9	93	[112]	40	17,300	59,100	
	KL	N	48.0		4.0	41.3	1530-1700	13.1	S 89 H 166	[108] [195]	38	27,300	54,000	570-1440 F or Lower Fineness
HARD -TYPE III For restorations subject to heavy stress, inlays thin 3/4 crowns, backings, bridge abutments, pontics, full crowns and saddles.	TT *	HN	75.0	6.0		10	1785-1830	15.6	S 115 H 145	[134] [153]	S 33 H 20	S 33,500 H 39,600	S 70,500 H 82,000	650-1460 F 615-1460 F 585-1450 F or Lower Fineness
	Special *	HN	75.0		3.0	11.25	1705-1760	15.5	S 110 H 139	[128] [158]	S 42 H 28	S 32,000 H 39,000	S 62,500 H 76,500	
	J-3	HN	66.0		4.0	20.0	1615-1725	14.7	S 120 H 165	[132] [182]	S 38 H 17	S 41,000 H 76,000	S 64,000 H 96,000	
	No. 7	HN	61.0		4.0	26.0	1645-1745	14.3	S 102 H 139	[121] [196]	S 40 H 16	S 37,100 H 70,200	S 74,200 H 123,600	615-1460 F or 585-1450 F Lower 570-1440 F Fineness 450-1405 F
	Par 7	HN	58.0		3.5	27.0	1670-1765	14.0	S 128 H 187	[148] [207]	S 29 H 11	S 42,250 H 80,250	S 62,750 H 90,750	
	GB	N	45.0		6.0	39.5	1620-1770	12.9	S 111 H 203	[130] [222]	S 34 H 9	S 46,000 H 77,000	S 66,000 H 107,000	
	No. 91	N	36.8		8.0	45.5	1550-1660	11.4	S 118 H 160	[137] [180]	S 35 H 15	S 36,000 H 49,500	S 60,100 H 90,200	
	No. 8	N	27.6		8.0	54.2	1540-1600	11.2	S 125 H 188	[145] [208]	S 32 H 15	S 37,800 H 52,000	S 63,200 H 94,600	
	No. 25 +	N			25.0	71.0	1980-2075	10.4	S 131 H 176	[150] [196]	S 5.5H 5.2	S 47,500 H 49,100	S 61,000 H 68,000	
													Gold Wipla 1530 F	
EXTRA HARD-TYPE IV Maximum strength and resiliency for cast partials, clasps, lingual bars, inlays, crowns and bridges.	Par Cast *	HN	69.5	2.0	3.5	12.0	1680-1725	15.6	S 140 H 210	[158] [229]	S 38 H 10	S 41,100 H 79,500	S 69,000 H 113,000	650-1475 F or Lower Fineness
	Par X-L	HN	66.5		3.5	16.3	1675-1705	15.4	S 137 H 220	[158] [229]	S 35 H 6	S 43,200 H 74,300	S 69,000 H 115,000	
	Par 5	HN	60.5		4.0	21.0	1663-1700	14.0	S 125 H 210	[149] [228]	S 37 H 9	S 44,300 H 97,100	S 79,000 H 135,000	
	Par 4	HN	55.5		7.0	25.5	1681-1705	14.1	S 130 H 220	[150] [238]	S 32 H 3.5	S 44,160 H 83,500	S 78,500 H 129,000	
	No. 120 **	N	50.0		4.0	28.0	1540-1620	12.3	S 135 H 240	[160] [255]	S 26 H 3	S 44,100 H 97,300	S 86,200 H 138,400	
	No. 46 **	N	42.0		8.0	35.0	1625-1702	11.8	S 140 H 235	[160] [255]	S 20 H 2.5	S 54,500 H 85,000	S 90,800 H 145,500	
FOR FUSING PORCELAIN TO METAL	Porc. 97SF	HN	97.7	2.0	0.0	0.0	1910-1995	18.9	38	[43]	45	5,000	21,000	Pre-Solders 2010 F 1990 F 2000 F 2020 F 1950 F
	Porc. I	HN	89.0	5.0	4.8	0.0	2095-2160	18.3	165	[185]	3.5	65,800	73,600	
	Porc. II	HN	87.5	10.0	1.0	0.0	1960-2085	18.9	165	[185]	5	72,500	87,000	
	Porc. I30	HN	86.5	1.5	9.5	0.5	2160-2210	18.0	198	[229]	7	56,250	76,250	
	Porc. I2	HN	75.0		13.0	9.0	2165-2255	16.0	175	[204]	6	59,000	78,250	
	Porc. PW	HN	73.8	9.0		9.2	1645-1815	16.3	200	[230]	6	72,500	100,000	
	Porc. 76SF +	HN	76.0		18.0	0.0	2000-2235	15.9	215	[250]	15	80,000	100,000	
	Porc. 65SF +	HN	65.0		26.0	0.0	2084-2291	15.2	220	[250]	15	80,000	100,000	
	Porc. 52SF +	HN	51.5		39.0	0.0	2340-2380	13.8	204	[224]	25	85,150	118,500	Post-Solder Gold Wipla
	Porc. W +	HN	50.0		31.0	13.0	2200-2245	13.8	200	[220]	10	80,000	100,000	
	Porc. IV +	HN	40.0		44.0	0.0	2175-2240	13.5	235	[255]	22	86,400	124,600	
	Porc. 76 +	N	1.8		76.0	0.0	2180-2200	11.1	310	[329]	9	163,000	186,000	
	Porc. 601 +	N	1.0		60.5	27.0	2240-2380	11.0	240	[260]	18	75,000	101,000	
Porc. 165 +	N			53.5	37.5	2160-2310	10.8	217	[236]	10	70,000	85,000		

* These Products appear on the American Dental Association of Certified Dental Metals

** These Products have been accepted by the American Dental Association

+ These Products are white gold color



NOTE: Properties of all ceramic gold alloys are firing cycle

Heat Treatment-Per American Dental Association Spec. No. 5

S - Soft H - Hard