

# Laser weld / Solders

## Laser Welding Wires

	Composition								Melting Range	
	Au	Pt	Pd	Ag	Cu	In	Zn	Others	°C	°F
● Laser Ceramic Yellow PdF	85.9	12.09	–	–	–	<1.0	1.5	Fe/Mn <1.0 Ir <1.0, Ta <1.0	1055–1170	1930–2140
● Laser Ceramic Yellow	85.0	7.5	3.0	3.0	–	1.5	–	Ir <1.0	1085–1215	1985–2220
● Laser C&B Yellow	75.0	3.0	–	13.5	7.0	1.5	–	Ir <1.0	900–960	1650–1760
● Laser Ceramic White	50.0	–	24.4	21.5	–	4.0	–	Ru <1.0	1200–1290	2190–2355
● Laser C&B White	18.5	–	6.0	72.5	–	3.0	–	Ir <1.0	985–1025	1805–1875

## Pre-Solder

Pre-Solder	Composition											Melting Range		Flow Point	
	Au	Pd	Ag	Cu	In	Li	Mn	Ni	Ru	Zn	Others	°C	°F	°C	°F
● High Fusing Yellow Ceramic Solder (HFYC)	80.0	4.2	15.4	–	<1.0	<1.0	–	–	–	1.0	Fe <1.0 Ca, Ti	1085–1115	1985–2040	1100	2010
● Y-2 Ceramic Solder	80.0	3.1	16.5	–	<1.0	<1.0	–	–	<1.0	–	Fe <1.0	1070–1100	1960–2010	1090	1995
● HGPKF 1030 Y (High Gold Palladium Copper free)	63.2	–	35.0	–	–	–	<1.0	–	–	<1.0	Pt <1.0 Ir <1.0	1015–1040	1860–1900	1030	1885
● HGPKF 1015 Y (High Gold Palladium Copper free)	60.0	–	36.5	–	<1.0	–	–	–	–	<1.0	Pt 2.1 Ir <1.0 Sn <1.0	975–1035	1785–1895	1015	1860
● Aquarius Ceramic Solder	56.0	1.9	39.7	–	<1.0	<1.0	1.0	–	–	1.0	Re < 1.0	970–1020	1780–1870	990	1815
● Golden Ceramic Solder (GC)	54.0	3.9	40.0	–	–	1.0	–	–	–	1.0	B <1.0 Re <1.0	995–1045	1825–1915	1020	1870
● Spartan Ceramic Solder	50.0	24.0	–	25.0	–	–	–	–	–	1.0	Ir <1.0	1080–1105	1975–2020	1065	1950
● Special High Fusing White Ceramic Solder (SHFWC)	47.0	10.3	41.0	–	1.4	–	–	–	<1.0	–	B <1.0 Ca <1.0 Ti <1.0	1045–1105	1915–2020	1105	2020
● High Fusing White Ceramic Solder (HFWC)	45.0	12.4	41.5	–	1.0	<1.0	–	–	<1.0	–	–	1100–1165	2010–2130	1135	2075
● Super Solder Ceramic Solder	–	53.5	7.0	–	–	<1.0	–	35.6	–	–	Sn 3.8	1085–1180	1985–2156	1135	2075

FLUX: High Fusing Bondal Flux – Ceramic bonded alloys  
High Fusing Bondal Flux NP – Predominantly base alloys **NEW**

## Universal-Solder

Universal-Solder	Composition							Melting Range		Flow Point	
	Au	Pt	Pd	Ag	Zn	In	Others	°C	°F	°C	°F
● Universal Solder PKF	48.8	2.8	–	40.5	7.3	<1.0	Ir <1.0	800–900	1470–1650	850	1560
● Universal Solder 1015 W	18.5	–	6.0	72.5	–	3.0	Ir <1.0	985–1025	1805–1875	1015	1860

FLUX: Bondal Flux – Universal Solder PKF  
High Fusing Bondal Flux – Universal Solder 1015 W

## Post-Solder

Post-Solder	Composition										Melting Range		Flow Point	
	Au	Ag	Cu	Ga	In	Li	Ni	Sn	Zn	Others	°C	°F	°C	°F
● High Fusing White Gold Solder (HFWG)	79.8	–	–	–	–	<1.0	11.8	–	8.3	–	880–910	1615–1670	895	1645
● .650 Fine Gold Solder	65.0	13.0	19.6	2.0	–	–	–	–	<1.0	–	785–835	1445–1535	830	1525
● .615 Fine Gold Solder	61.5	13.1	17.4	–	7.6	–	–	–	<1.0	–	690–775	1275–1430	775	1425
● .585 Fine Gold Solder	58.5	16.0	18.0	7.2	–	–	–	–	<1.0	–	610–725	1130–1335	725	1335
● Low Fusing White Gold Solder (LFWG)	56.1	27.4	–	–	<1.0	–	–	<1.0	15.8	–	665–710	1230–1310	730	1350

FLUX: Bondal Flux – Crown and bridge alloys, ceramic bonded alloys  
High Fusing Bondal Flux NP – Predominantly base alloys **NEW**