

You will be certain to find a solder suited to your requirements in Umicore’s wide range of Ready Stock solder coupons. Although technically brazing alloys based on their melting ranges, the jewellery industry traditionally refers to this set of alloys as solders.

Each alloy in this set has been designed to flow, wet and bond fabricating and or casting alloy segments together, at appropriate superheat over the liquidus temperature shown when standard metal joining techniques and procedures are used.

Each lot of solder alloy manufactured at Umicore is checked to confirm it is Cadmium and Lead free (< 50 ppm each) by current definitions. In addition, the Nickel content is also determined for each lot processed to ensure it is under 100 ppm in solder alloys that do not include Nickel as an alloying component. This provides options for your consideration when you need to ensure soldered items remain Nickel free after joining. Please refer to the SDS to determine which alloys contain Ni.

In addition:

Karat gold solders

- Are plumb for the karat ordered to help ensure Hallmarking regulations are met for the final assembled item.
- Are available in several colours for each karat. Since a trace of solder often remains and could therefore be visible between the two pieces joined, this provides options for your consideration when designing the assembled item.
- Are available in the standard flow range classifications (extra easy, easy, medium, and hard) for step soldering applications. Approximate coupon weight is 1.5 – 2 grams.

Silver Solders

- Three solders are offered, one each in the easy, medium and hard melting range class.
- The silver content of each alloy is over 60% to help ensure Hallmarking regulations are met for the final assembled item. Approximate coupon weight is 16 to 16.5 grams.

Platinum Solders

- We carry the typical range of alloys for the Platinum jewellery industry, i.e the name of the solder is its liquidus temperature. Approximate coupon weight is 2 to 2.5 grams.

PLATINUM SOLDER SPECIFICATIONS				
PART NO.	ALLOY	LIQUIDUS	SOLIDUS	DENSITY gr/cm ³
SC90W000000	P1000	1000°C/1832°F	980°C/1796°F	10.24
SCPTS000000	P1100	1090°C/1994°F	1080°C/1976°F	13.34
SCPTS000000	P1200	1200°C/2192°F	1150°C/2102°F	13.53
SCPTS000000	P1300	1305°C/2381°F	1260°C/2300°F	17.89
SCPTS000000	P1400	1400°C/2552°F	1390°C/2534°F	16.25
SCPTS000000	P1500	1510°C/2750°F	1480°C/2696°F	15.50
SC95W000000	P1650 (95% platinum)	1650°C/3002°F	1550°C/2822°F	19.23

GOLD SOLDER SPECIFICATIONS

PART NO.	ALLOY	LIQUIDUS	SOLIDUS	DENSITY gr/cm ³
SC10YEE0000	10K Yellow Extra-Easy	708°C/1306°F	654°C/1209°F	11.69
SC10YE00000	10K Yellow Easy	730°C/1346°F	705°C/1301°F	11.76
SC10YM00000	10K Yellow Medium	763°C/1369°F	743°C/1369°F	11.95
SC10YH00000	10K Yellow Hard	795°C/1463°F	777°C/1431°F	12.27
SC10WE00000	10K White Easy	794°C/1461°F	772°C/1422°F	11.93
SC10WM00000	*NEW 10K White Medium	790°C/1454°F	750°C/1382°F	11.56
SC10WH00000	10K White Hard	925°C/1697°F	860°C/1580°F	11.66
SC10RM00000	*NEW 10K Red Medium	850°C/1562°F	830°C/1526°F	10.91
SC14YEE0000	*NEW 14K Yellow Extra-Easy	690°C/1275°F	622°C/1152°F	12.90
SC14YE00000	14K Yellow Easy	728°C/1342°F	685°C/1265°F	12.77
SC14YM00000	14K Yellow Medium	774°C/1425°F	757°C/1395°F	13.13
SC14YH00000	14K Yellow Hard	807°C/1485°F	795°C/1463°F	13.44
SC14WE00000	14K White Easy	738°C/1360°F	712°C/1314°F	12.72
SC14WM00000	*NEW 14K White Medium	750°C/1382°F	720°C/1328°F	12.74
SC14WH00000	14K White Hard	865°C/1589°F	800°C/1472°F	12.40
SC14GM00000	14K Green	776°C/1429°F	750°C/1382°F	13.02
SC14RM00000	14K Red Medium	865°C/1589°F	850°C/1562°F	13.36
SC14RH00000	*NEW 14K Red Hard	855°C/1571°F	835°C/1535°F	12.66
SC18YE00000	18K Yellow Easy	750°C/1382°F	726°C/1339°F	14.53
SC18YM00000	18K Yellow Medium	781°C/1438°F	765°C/1409°F	14.66
SC18YH00000	18K Yellow Hard	804°C/1479°F	797°C/1467°F	14.71
SC18WE00000	18K White Easy	834°C/1533°F	803°C/1477°F	14.26
SC18WM00000	18K White Medium	888°C/1630°F	832°C/1530°F	14.43
SC18WH00000	18K White Hard	902°C/1656°F	888°C/1630°F	14.51
SC18RM00000	18K Red Medium	856°C/1573°F	827°C/1521°F	14.77
SC19WM00000	19K White	877°C/1611°F	827°C/1521°F	15.62

SILVER SOLDER SPECIFICATIONS

PART NO.	ALLOY	LIQUIDUS	SOLIDUS	DENSITY gr/cm ³
SCSSWI04E00	I04 Easy	680°C/1256°F	640°C/1249°F	9.18
SCSSWI02M00	I02M Medium	730°C/1346°F	720°C/1328°F	9.68
SCSSWI03H00	I03H Hard	786°C/1446°F	764°C/1407°F	9.98