



Hirsch Metals Corporation
 2200 NW Corporate Blvd.
 Suite 303
 Boca Raton, FL 33431

Tel: 800-521-0352
 Tel: 561-994-6440
 FAX: 561-994-6880

SOLDER ALLOYS Selection Chart

Typical Uses	Composition % Weight Tin/Lead	Temperature °F		Tensile Shear Density #/ in ³
		Solidus	Pasty Liquidus	
Non-critical sealing and filling, auto body repair and filler.	2/98	601	611 10	3500 3100 .40
Coating steel and copper. Joining parts subject to vibration in cryogenic service.	5/95	586	594 8	4000 2100 .397
Coating steel or copper for durable, corrosion resistance against mild acids, and seawater.	6/94	570	590 20	4800 3000 .390
Coating steel for corrosion resistance where there is subsequent soldering of fittings.	7/93	550	587 37	4200 3000 .389
Fabricating auto radiators & gas tanks, coating and bonding metals subjected to moderate service temperatures. Auto body dent filling.	10/90	514	570 56	4400 3000 .389
	12/88	490	565 75	4500 2600 .380
Coating tubes and sheets, automatic radiator assembly, body filling.	15/85	440	550 110	4600 2700 .380
Coating radiator tubes for joining fins.	20/80	361	531 170	4800 3000 .363
Soldering auto radiators, machine, dip and hand soldering for plumbing fixtures and fittings, superior filler for auto body repairs.	25/75	361	511 150	4900 3500 .369
	30/70	361	491 130	5000 4000 .350
A lower cost alternative alloy than 40/60 for wiping and sweating joints.	35/65	361	477 116	5200 4300 .343
Joining cables, wiping and joining lead pipes, electrical and radiator repairs.	40/60	361	460 99	4900 4400 .328

© 2006 Hirsch Metals Corp. – All rights reserved



Hirsch Metals Corporation
 2200 NW Corporate Blvd.
 Suite 303
 Boca Raton, FL 33431

Tel: 800-521-0352
 Tel: 561-994-6440
 FAX: 561-994-6880

SOLDER ALLOYS Selection Chart (cont'd)

Typical Uses	Composition % Weight Tin/Lead	Temperature °F			Tensile Shear Density #/ in ³
		Solidus	Pasty	Liquidus	
Soldering radiator cores, roof seams, and decorative joints.	45/55	361	441	80	5700 4900 .321
Wiping and assembly of plumbing joints. (Not for drinking supplies)	50/50	361	421	60	5500 4700 .321
Wave and hand soldering of electronic assemblies, a lower cost alternative to 63/37.	60/40	361	374	13	7600 5600 .306
Eutectic alloy, the first choice for general purpose wave or hand soldering of electronic assemblies.	63/37	361	361	0	7500 6200 .304
Instrument and electronic work for reduced leaching of silver on coated surfaces.	62/36Sb/2 Ag	354	354	0	9600 6600 .307
High creep strength solder for both elevated and cryogenic service temperatures.	1/97.5Sb/1.5 Ag	588	588	0	4400 3400 .408
Lead-Free alloy with high strength and creep resistance. Will withstand service temperatures to 212F. Stained glass, plumbing, radiator repair. Suitable for potable water supply.	95/5 Sb	452	464	12	5900 6000 .262
Lead-Free for potable water supplies, radiator repairs and for stained glass windows.	97/3 Cu	449	630	181	6420 5680 .212
Lead-Free silver bearing solder. For stained glass windows, radiator and plumbing. High hardness, creep resistance. Wide range of patina and colors. Lead-free for potable water supplies. Excellent High strength silver solder for radiator repair.	97/2.75Cu/.25 Ag	442	597	155	11,520 8900 .339

This is a listing of some of our most popular alloys. Call us for more information on specific requirements.
 We will always develop a special alloy for a particular purpose. 1-800-521-0352

© 2006 Hirsch Metals Corp. – All rights reserved