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Solder Alloy Chart

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Alloy	Melt Point (°C)	Application
Sn42 Bi58	138	Low temperature applications. Attention should be paid to potential embrittlement issues and poor thermal fatigue properties.
Sn42/Bi57/Ag1	138	Similar characteristics to Sn42/Bi58, with improved fatigue characteristics.
SAC305 (Sn/Ag3/Cu0.5)	217-218	Tin-silver-copper alloy in line with JEIDA recommendation.
SAC387 (Sn/Ag3.8/Cu0.7)	217-218	Alternative tin-silver-copper alloy. Similar characteristics as SAC305 with slightly higher cost of metals.
SAC405 (Sn/Ag4/Cu0.5)	217-218	High-silver tin-silver-copper alloy. Similar characteristics as SAC305 with higher cost of metals.
SAC 0307 (Sn/Ag0.3/Cu0.7)	217-227	Low cost Sn-Ag-Cu alloy. Superior fluidity compared to other alloys and makes of bar, resulting in excellent flow when used in wave soldering.
SAC 0107 Sn/Ag0.1/Cu0.7	217-228	Lowest available silver version of the SAC alloy family. This alloy is a low cost alternative for flow soldering.
Sn96.5/Ag3.5	221	May not have adequate thermal reliability or wetting and requires higher soldering temperatures than tin-silver-copper alloys.
SN100C® (Sn/Cu0.7/Ni0.05+Ge)	227	Ni and Ge-doped Sn/Cu alloy. Bright solder joints, improved wetting.
Sn99.3/Cu0.7	227	Cost-effective alternative for wave soldering and hand soldering applications. Attention should be paid to poor wetting and fatigue properties.
Sn97/Cu3	227-300	Alloy for high-temperature applications only.
96S (Sn96/Ag4)	221	Excellent alloy for soldering stainless steel.
95A (Sn95/Sb5)	232-240	Alloy for high-temperature applications only. Poor wetting. Less cost-prohibitive than Sn/Ag.
Sn5/Pb93.5/Ag1.5	305-306	High-temperature alloy used mainly for semiconductor attachment to ceramic boards. Also used in fuse and thermal couple attachment
Sn63/Pb37	183	Standard leaded electronic assembly alloy.
Sn60/Pb40	183-188	General purpose leaded Industrial solder
Sn50/Pb50	183-212	Lower cost alternative to Sn60 /Pb40
Sn40/Pb60	183-234	Higher temperature & increased pasty range
Sn 62/Pb36/Ag2	179	Leaded Eutectic low temp solder
5S (Pb93/Sn5/Ag2)	296-301	Known as HMP alloy, high temp electrical applications
LS4 (5Sn/ 94Pb /1Ag)	294-305	Transformer Winding applications.