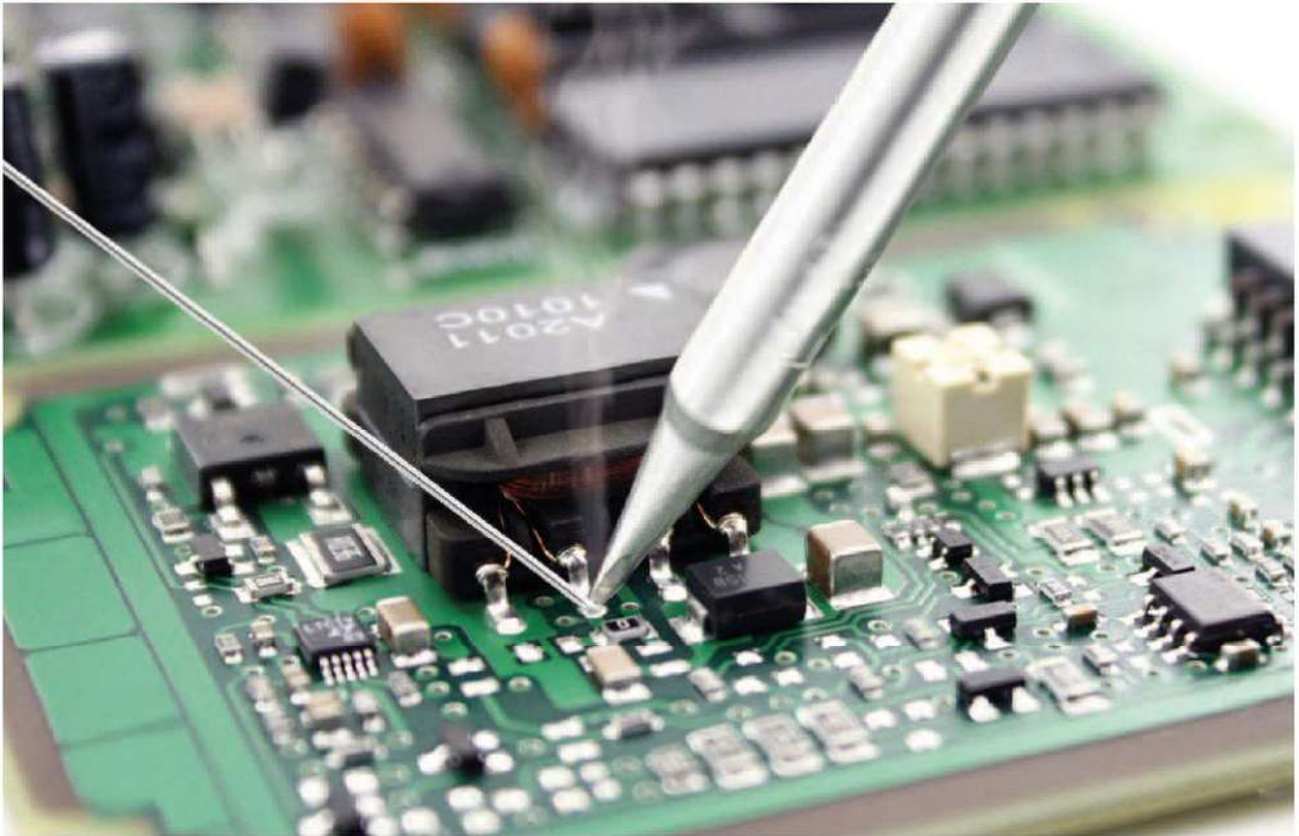




SOLDERING RANGE



SOFT SOLDERS - LEAD FREE

PRODUCT	ISO 9453	SOLIDUS °C	LIQUIDUS °C	COMPOSITION (%)					DIMENSIONS	
				Sn	Ag	Cu	Zn	OTHER	FLUX CORED	MASSIVE
Sn99,3Cu0,7	Sn99,3Cu0,7	227	227	99,3	-	0,7	-	-	0,15-4,0mm	0,25-10,0mm
Sn100Ni+	Sn99,25Cu0,7Ni0,05	227	227	99,25	-	0,7	-	NiGe 0,05	0,15-4,0mm	0,25-10,0mm
9730	Sn97Cu3	230	250	97	-	3	-	-	0,15-4,0mm	0,25-10,0mm
P30	Sn97Ag3	221	224	97	3	-	-	-	0,15-4,0mm	0,25-10,0mm
Sn95,5	Sn95,5Ag3,8Cu0,7	217	217	95,5	3,8	0,7	-	-	0,15-4,0mm	0,25-10,0mm
Sn99,9	Sn99,9	232	232	99,9	-	-	-	-	-	0,25-10,0mm
ES217	Sn87Ag10Cu3	280	280	87	10	3	-	-	-	0,25-10,0mm
138SnBi	Bi58Sn42	138	138	42	-	-	-	Bi58	-	2,0-10,0mm
Sn90Zn10	Sn90Zn10	199	203	90	-	-	10	-	-	0,25-10,0mm
Sn92Cu8	Sn92Cu8	230	350	92	-	8	-	-	-	0,25-10,0mm
Sn90Zn7Cu3	Sn90Zn7Cu3	200	280	90	-	3	7	-	-	0,25-10,0mm
Sn99Ag+	Sn99Cu0,7Ag0,3NiGe	217	227	99	0,3	0,7	-	(NiGe)	0,15-4,0mm	0,25-10,0mm
Bi57Sn42Ag1	Bi57Sn42Ag1	139	139	42	1	-	-	Bi 57	-	1,0-10,0mm



METAL PASTES (CONTAINING FLUX)

PRODUCT	ISO 9453	SOLIDUS °C	LIQUIDUS °C	COMPOSITION (%)				PACKAGE SIZE
				Sn	Pb	Ag	Cu	
9730	Sn97Cu3	230	250	97	-	-	3	100g, 250g
P30	Sn97Ag3	221	224	97	-	3	-	100g, 250g
Sn95,5	Sn95,5Ag3,8Cu0,7	217	217	95,5	-	3,8	0,7	100g, 250g
Sn99,9	Sn99,9	232	232	99,9	-	-	-	100g, 250g
BERA-FIX		183	238	40	60	-	-	500g
40Sn/60Pb	Sn40Pb60	183	190	60	40	-	-	100g, 250g
60Sn/40Pb	Pb60Sn40	183	190	60	40	-	-	100g, 250g
230Al	Sn97Cu3	230	250	97	-	-	3	100g, 250g

SMD PASTES

ALLOY	SOLIDUS °C	LIQUIDUS °C	METAL POWDER FORM	METAL CONTENT	GRAIN SIZES	VISCOSITY	FLUX "Active-Clear"
Sn99Cu0.7Ag0.3	221	227	ball-shaped	85-89%	3= 25-45 µm 4= 20-38 µm 5= 15-25 µm	Low = 680,000 mPas Standard= 780,000 mPas High= 880,000 mPas	EN ISO 9454,1222 DIN EN 61190-1-3 REL1 IPC J-STD-004B
Sn96.5Ag3Cu0.5	217	220					
Sn95.5Ag3.8Cu0.7	217	217					
Sn100Ni+/ Sn100C (Sn99.25Cu0.7Ni0.05)	227	227					

- LEAD CONTAINING



PRODUCT	ISO 9453	SOLIDUS °C	LIQUIDUS °C	COMPOSITION (%)						DIMENSIONS	
				Sn	Pb	Ag	Cu	Zn	OTHER	FLUX CORED	MASSIVE
50Sn/50Pb	Pb50Sn50	185	216	50	50	-	-	-	-	0,15-4,0mm	0,25-10,0mm
40Sn/60Pb	Pb60Sn40	183	238	40	60	-	-	-	-	0,15-4,0mm	0,25-10,0mm
60Sn/40Pb	Sn60Pb40	183	190	60	40	-	-	-	-	0,15-4,0mm	0,25-10,0mm
60Sn/38Pb/ 2Cu	Sn60Pb39Cu	183	190	60	38	-	2	-	-	0,15-4,0mm	0,25-10,0mm
60Sn/38Pb/ 2Sb	Sn60Pb38Sb2	185	240	62	38	-	-	-	Sb 2	-	0,25-10,0mm
Karosseritenn Body filler		188	250	27,5	71	-	-	-	Sb 1,5	-	20x5mm
63Sn/37Pb	Sn63Pb37	-	-	-	-	1,0	<0,1	<0,15	<0,15	0,15-4,0mm	0,25-10,0mm
LAG296	Pb93Sn5Ag2	296	301	5	93	2	-	-	-	0,15-4,0mm	0,25-10,0mm
70Pb/30Sn	Pb70Sn30	183	254	30	70	-	-	-	-	-	0,25-10,0mm
65Pb/35Sn	Pb65Sn35	183	245	35	65	-	-	-	-	-	0,25-10,0mm



FLUXES FOR FLUX CORED SOLDERS

PRODUCT	DIN EN 29454.1 DIN EN 61190-1-3	BASIS	SOLUBLE	ACTIVATION	APPLICATION	CLANING POST SOLDERING
RA	1.1.2.B ROM1	resin, rosin	Alcohol	Organic acid	Electronic mechanics	In rare cases
CLEAR	1.2.2.B REM1	modified resin	Alcohol	Organic acid Halide containing	Electronic	No
SP	1.1.2.B ROM1	organic	Water	Amine halide free	Copper, steel	Yes
KD	3.1.1.B	non organic	Water	Zinkchloride Ammoniumchloride	Copper, steel	Yes
VA	3.1.1.C	non organic	Water	Nonn-organic Halide containing	Stainless steel	Yes
EL	1.1.3.B ROLO	resin, rosin	Alcohol	Organic acid Halide free	Electronic	No
ELR	ORLO	organic	Alcohol	Organic acid Halide free	Electronic	No
AI	2.1.2.C	organic	Water	Amine	Aluminium	Yes
Laser-RA	REM1	modified resin	Alcohol	Organic acid Halide containing	Electronic mechanics	In rare cases
Kolo	1.1.2.B ROLO	rosin modified rosin	Alcohol	Resin	Copper, led	No
RA-CLEAR	REM1	modified resin	Alcohol		Electronic	No
ULTRA-CLEAR	RELO	modified resin	Alcohol		Electronic	NO

ALUMINIUM - ZINK SOLDERS

PRODUCT	ISO 9453	SOLIDUS °C	LIQUIDUS °C	COMPOSITION (%)						DIMENSIONS	
				Sn	Pb	Ag	Cu	Zn	OTHER	FLUX CORED	MASSIVE
230Al	Sn97Cu3	230	250	97	-	-	3	-	-	1,5-2,0mm	-
FD-Al	Sn60Zn40	200	340	99,25	-	-	-	40	NiGe 0,05	-	0,25-10,0mm
75Sn/25Zn	Sn75Zn25	200	325	75	-	-	-	25	-	-	0,25-10,0mm



BEARING METALS / BABBIT ALLOYS

ALLOY	DELIVERY FORMS
Sn89Sb7,5Cu3,5	8-10kg blocks, wires
Sn81,3Sb12Cu6Zn0,6Ag0,1 (MS²)	8-10kg blocks, wires
PbSb14SnCuAs (WM9)	8-10kg blocks, wires
PbSb15Sn10 (WM10)	8-10kg blocks, wires
SnSb12Cu6Pb (WM80)	8-10kg blocks, wires



SOLDERING FLUXES



PRODUCT	DIN EN 29454.1	APPLICATION	PACKAGING UNIT
EFFEKTO 1	DIN EN 29454.1 3.1.1.A (F-SW 12)	Copper, alloys, steel, led, galvanized metal	1 l
Solder liquid	DIN EN 29454.1 3.1.1.A (F-SW 12)	Copper, steel	100ml, 500ml, 1000ml
Solder grease	DIN EN 29454.1 3.1.1.C (F-SW 21)	Copper alloys	50g, 70g, 100g, 250g
Solder grease Bera	-	Copper alloys, steel, stainless steels, roofing	70g
Z-fluss	DIN EN 29454.1 3.2.2.A (F-SW11)	Copper alloys, steel, stainless steels	100ml, 250ml, 500ml
Z-fluss Spezial	DIN EN ISO 9454-1 3241	High alloyed stainless steels	100ml, 250ml
ZD-Pro	DIN EN 29454.1 3.2.2.A (F-SW11)	Zink, Reinzink, Nedzink	100ml, 250ml
Lödgel allround	DIN EN 29454.1 3.1.1.A	Bright rolled metals in the roofing trade	500ml
Gelclean	-	Copper	125g
600 Al	DIN EN 29454.1 2.1.2.C (F-LW 2)	Aluminium alloys Mg content <1,2%, copper	30ml, 100ml, 500ml

