

# Lead-free solder paste line up

## TM-HP

Miscellaneous alloys

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **high PH resistance, perfect print shape**  
Powder size: **Type4(W)**20-38µm, **Type5(U)**10-28µm, **Type6(N)**4-24µm

## TM-HP-S

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROLO**  
Key point: **High speed printing**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## TM-HP(L)

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Long stencil life**  
Powder size: **Type4(W)**20-38µm, **Type5(U)**10-28µm, **Type6(N)**4-24µm

## TM-HP-P

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Hard to wet components**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## SUC-UI

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROLO**  
Key point: **O2 reflow, high PH resistance**  
Powder size: **Type4(W)**20-38µm, **Type5(U)**10-28µm

## SUC-FS

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROLO**  
Key point: **Component size 01005, high PH resistance**  
Powder size: **Type5(U)**10-28µm, **Type6(N)**4-24µm

## SUC

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **O2 reflow**  
Powder size: **Type4(W)**20-38µm, **Type5(U)**10-28µm

## PMK

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Less flux spitting**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm, **Type5(U)**10-28µm

## FS

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Components size 01005**  
Powder size: **Type6(N)**4-24µm

## SKB

Sn-Ag-Bi-Sb solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Good printing small apertures, 01005 Chip**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm, **Type5(U)**10-28µm

## NH

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROLO** 100% Halide-free  
Key point: **Halide free production**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## NH(E)

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROLO** 100% Halide-free  
Key point: **Halide-free, minimize solder ball**  
Powder size: **Type5(U)**10-28µm

## NH(EB)

Sn-Ag-Cu-Bi-Fe solders

Flux classification J-STD-004 1.2: **ROLO** 100% Halide-free  
Key point: **Halide-free, reduces voiding substantially**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## NH(I)

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROLO** 100% Halide-free  
Key point: **Halide free, small powder**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm, **Type5(U)**10-28µm

## NH(K)

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROLO** 100% Halide-free  
Key point: **Halide-free, oxidized components**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## NH(M)

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROLO** 100% Halide-free  
Key point: **Halide-free, Paper phenol**  
Powder size: **Type4(W)**20-38µm

## NH(LS)

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROLO** 100% Halide-free  
Key point: **Halide-free laser application**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## SSI-M

Sn-Ag-Cu solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Laser application**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## INP

Sn-Ag-Bi-In solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Low melting point area, long reliability**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## IBL

Sn-Ag-Bi-In solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Low melting point area**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## MHS-32

Sn-Zn-Bi solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Low melting point area**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

## A-75C(L)

Sn-Bi solders

Flux classification J-STD-004 1.2: **ROL1**  
Key point: **Special low melting point, eutectic**  
Powder size: **Type3(X)**25-45µm, **Type4(W)**25-38µm

### Product name component for solder paste

(Example) LFM-48 W TM-HP

Alloy type; powder size; flux name

Flux name	Alloy name	Composition	Flux contents	Melting range	Powder size
TM-HP	LFM-48	Sn-3.0Ag-0.5Cu	12%	217-220°C	X, W, U
	LFM-73	Sn-1.0Ag-0.5Cu	12%	217-226°C	W
	LFM-86	Sn-0.3Ag-0.7Cu	12%	217-227°C	W
	LFM-8	Sn-3.0Ag-0.7Cu-3.0Bi	12%	206-215°C	X, W
	LFM-14	Sn-3.5Ag-0.7Cu	12%	217-218°C	X, W
	LFM-34	Sn-3.5Ag	12%	221°C	X, W
TM-HP(L), TM-HP-S,	LFM-48	Sn-3.0Ag-0.5Cu	12%	217-220°C	X, W, U
TM-HP-P, NH, NH(K)	LFM-48	Sn-3.0Ag-0.5Cu	12%	217-220°C	X, W
SUC-UI, SUC, PMK,	LFM-48	Sn-3.0Ag-0.5Cu	11.5%	217-220°C	X, W, U
NH(I), NH(M), NH(E)	LFM-48	Sn-3.0Ag-0.5Cu	11.5%	217-220°C	
SUC-FS	LFM-48	Sn-3.0Ag-0.5Cu	12%	217-220°C	U, N
FS	LFM-48	Sn-3.0Ag-0.5Cu	12%	217-220°C	N
NH(LS), SSI-M	LFM-48	Sn-3.0Ag-0.5Cu	13%	217-220°C	X, W
NH(EB)	SJM-03	Sn-0.3Ag-0.7Cu-2.0Bi-0.01Fe	11.5%	210-225°C	W, U
	SJM-10	Sn-1.0Ag-0.7Cu-2.0Bi-0.01Fe	11.5%	212-224°C	W, U
SKB	SJM-30	Sn-3.0Ag-2.0Bi-1.0Sb	11.5%	216-224°C	W, U
	SJM-35	Sn-3.5Ag-2.0Bi	11.5%	216-220°C	W, U
IBL	LFM-52	Sn-3.5Ag-0.5Bi-3.0In	11%	207-214°C	X, W
INP	LFM-70	Sn-3.5Ag-0.5Bi-8.0In	11%	194-206°C	X, W
MHS32	LFM-31	Sn-3.0Bi-8.0Zn	12%	190-199°C	X, W
A-75C(L)	LFM-65	Sn-58Bi	12%	139°C	X, W

\*LFM-48 has been sublicensed for US PAT No.5527628