

# Core Solders

Usable over wider applicable range from hand to robot soldering.  
Soldering performance is superior to normal Sn-Pb solder.

## SR-34 Super

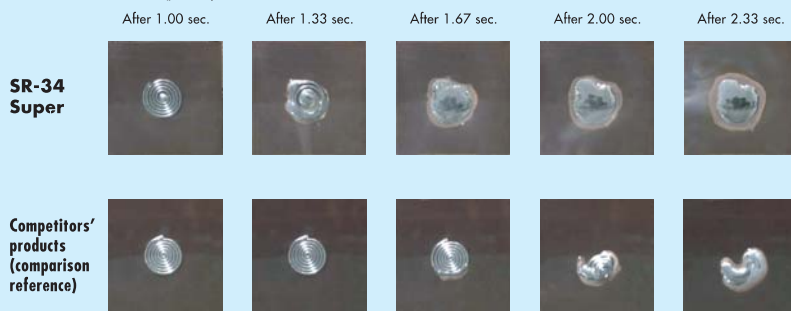
1. Initial wetting spreadability of the solder is higher with workability similar to conventional soldering.
2. Wetting spreadability can be performed with lower temperature soldering iron, assuring higher performance for heat damageable parts and substrates.
3. Reducing the problem of whitening metal surface in the case of soldering with Pb-free solder, such as Sn-Ag-Cu.
4. Enables quick soldering.

Examples of application: **Sn-Ag-Cu solders** Single-sided and through-hole substrates. **Sn-Cu solders** Rework and adjustment of single-sided substrates.



### Spreading Test (in sequential photographs)

[Condition] Sequential photographs were taken to observe wetting spreadability on Cu plates at 310°C soldering temperature.

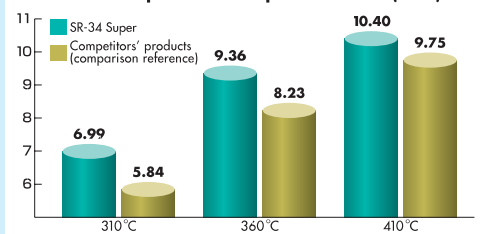


### Average dimension of point soldering

[Condition] An automatic soldering machine was used to observe average dimensions of spreaded area at soldered 20 points.

-Iron chip temperature: 310°C, 360°C, & 410°C -Wire traveling amount: Core solder diameter 0.80 0.5mm  
-Wire traveling speed: 1.0 mm/sec. -Iron chip heating time: 0.3 sec. each

#### Dimensions of point solder spreaded area (mm<sup>2</sup>)



### SR-34

Maintaining wettability, active stability, and controllability, enabling excellent soldering.

Examples of application :  
**Sn-Ag-Cu solders** Single-sided and through-hole substrates.

### KR-19

Appropriate to use for materials and parts, which are not so easy to solder, such as Ni-Sn alloys.

Examples of application :  
**Sn-Ag-Cu solders** General parts, terminals, and Ni-containing parts.  
**Sn-Cu solders** Rework and adjustment of single-sided substrates.

### KR-19SH RMA

The high thermal resistance flux enables linear and narrow-pitch soldering.

Examples of application :  
**Sn-Ag-Cu solders** Multi-pin parts (QFP & connectors), adjusting substrates, and installing LCDs.  
**Sn-Cu solders** Rework and adjustment of single-sided substrates.

### HR-19M

High reliability which makes it especially useful for point soldering.

Examples of application :  
**Sn-Ag-Cu solders** Multi-pin parts (QFP & connectors), adjusting substrates, and installing LCDs.

### G-14

RMA type flux improved for Pb-free soldering to protect thermal damage. P-4 is a suitable solder for robots.

Examples of application :  
**Sn-Ag-Cu solders** Multi-pin parts (QFP & connectors), adjusting substrates, and installing LCDs.

### GUMMIX-19CH

Improved flux to prevent both separation and scattering of flux residue during soldering.

Examples of application :  
**Sn-Ag-Cu solders** Pickup, relay, and SW.

### GUMMIX-SB RMA

A compatible product with soft-beam soldering. Improved GUMMIX type one.

Examples of application :  
**Sn-Ag-Cu solders** Pickup, relay, and SW.

#### Product name component for Core Solders

(Example) SR-34 super LFM-48 3.5% 0.3Ø  
Flux name; alloy type; flux content; core solder diameter

#### Core Solder products specification

Flux name	Alloy type	Flux content	Melting point temperature	Core solder diameter (mmØ)
SR-34 super	LFM-48 (Sn-3.0Ag-0.5Cu)	3.5%	217-220°C	0.3, 0.38, 0.5, 0.65, 0.8, 1.0, 1.2, 1.6
		4.5%		
SR-34	LFM-22 (Sn-0.7Cu)	3.5%	227°C	0.5, 0.65, 0.8, 1.0, 1.2, 1.6
		4.5%		
KR-19	LFM-48 (Sn-3.0Ag-0.5Cu)	3.5%	217-220°C	0.3, 0.38, 0.5, 0.65, 0.8, 1.0, 1.2, 1.6
		4.5%		
KR-19SH RMA	LFM-22 (Sn-0.7Cu)	P-3	217-220°C	0.3, 0.38, 0.5, 0.65, 0.8, 1.0, 1.2, 1.6
		P-4		
HR-19M	LFM-48 (Sn-3.0Ag-0.5Cu)	P-3	217-220°C	0.3, 0.38, 0.5, 0.65, 0.8, 1.0, 1.2, 1.6
		P-4		
G-14	LFM-48 (Sn-3.0Ag-0.5Cu)	3.5%	217-220°C	0.3, 0.38, 0.5, 0.65, 0.8, 1.0, 1.2, 1.6
		4.5%		
GUMMIX-19CH	LFM-48 (Sn-3.0Ag-0.5Cu)	3.5%	217-220°C	0.3, 0.38, 0.5, 0.65, 0.8, 1.0, 1.2, 1.6
GUMMIX-SB RMA	LFM-48 (Sn-3.0Ag-0.5Cu)	3.5%	217-220°C	0.3, 0.38, 0.5, 0.65, 0.8, 1.0, 1.2, 1.6

\*LFM-48 has been approved for JP PAT No.3027441 and US PAT No.5527628. \*If the ordered core solder diameter is out of stock, please contact with our sales representative.