



Multicore Lead-Free Solder Wire Solutions



A complete, lead-free product line for production, rework and repair.

Now you can extend lead-free solutions to your production, rework and repair processes, with Henkel's full range of no-clean lead-free multiple cored solder wires, the Hydro-X water-washable flux system and TTC-LF tip tinner. The entire product line incorporates our world-famous Multicore cored wire flux technology and is ideal for all types of hand soldering assembly and rework.

The Multicore cored wire flux technology is offered in combination with the industry standard lead-free alloys SAC305 (97SC), SAC387 (96SC) and 99C. You can select from three no-clean, low-color residue wires with different activity levels and a rosin-based cored wire to meet your specific requirements.

Using either SAC305 (97SC) or SAC387 (96SC) for rework or repair guarantees total compatibility with SMT reflow joints that usually use the same alloy. If you require a different metal variant, ask us about providing it for you.

Because soldering temperatures may not be as carefully controlled during hand soldering as they are during the SMT manufacturing reflow process, the 99C (99.3% Sn, 0.7% Cu) alloy is a safe alternative to either standard SAC alloy. It is also fully compatible with most lead-free alloys and offers a significant cost advantage.

Providing turnkey lead-free solutions and support

With the July 2006 EU deadline for full implementation of lead-free soldering approaching, Henkel ensures that all aspects of your production, from initial assembly through rework and repair, will comply with the required elimination of lead.

As a world leader in helping you re-acquire material sets, Henkel delivers turnkey solutions for your entire process, including rework and repair, along with technical and engineering support. Our Go Lead-Free initiative minimizes conversion risks and enables you to introduce new lead-free products quickly, in high volume and high quality.

400 attributes	Process Benefit
Halide-free, meets ROLO J-STD classification	Meets safety requirements for halide-free formulations
Flux content – 3%	Good wetting
No-clean	Complements no-clean wave and reflow soldering processes
Clear, low residue	Allows repairs without a second cleaning process
Spreads well on copper and brass	Especially suitable for SMT touch-up



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511 attributes	Process Benefit
1.1% halide content, meets ROM1 J-STD classification	High activity flux with excellent wetting on difficult substrates
Increased flux content - 3%	Improves wetting
No-clean	Complements no-clean wave and reflow soldering processes
Clear, low residue	Improves appearance
Very fast soldering	Improves process productivity
Spreads well on copper brass and nickel, excellent wettability even on surface with poor solderability	Allows soldering on various substrates with poor solderability
Good activity on nickel, depending on state of oxidation of nickel finish	Allows rework on solder-coated materials
Heat stable	Well suited to applications requiring high melting temperature alloys

502 attributes	Process Benefit
0.2 % halide content, meets ROM1 J-STD classification	Medium activity flux with good wetting on difficult substrates
Increased flux content - 3%	Improves wetting
No-clean	Complements no-clean wave and reflow soldering processes
Clear, low residue	Improves appearance
Spreads well on copper brass and nickel, good wettability on different surface finishes	Allows soldering on various substrates with poor solderability
Heat stable	Well suited to applications requiring high melting temperature alloys

309 attributes	Process Benefit
<1% halide content, rosin-based, meets ROM1 J-STD classification	High activity with excellent wetting performance on difficult substrates
Amber residue	Typically for rosin based flux types. Easy to remove with normal flux cleaners, or leave as added protection for the solder joint
No-clean, but can be cleaned with solvents if necessary	Complements no-clean wave and reflow soldering processes, allows cleaning where required
Very fast soldering	Suitable for automatic soldering process

Hydro-X attributes	Process Benefit
3% halide content, high acidity, meets ORH1 J-STD classification	High activity with excellent wetting performance on difficult substrates
Water washable with no insoluble residues, no need for added neutralizers	Guarantees a completely safe and reliable assembly
Fast wetting, rapid soldering of most difficult surface finishes	Improves productivity

TTC-LF attributes	Process Benefit
A small block of electronics-grade lead-free solder powder and flux compacted into the shape of a thick disc; meets DTD 599A and BS 5625 copper mirror corrosion tests	Ideal for fast and effective cleaning and re-tinning of de-wetted and badly oxidized soldering irons that cannot be re-tinned by sponges, pads or rosin-cored solder wire
Rapidly re-tins badly oxidized soldering irons	Improves productivity
Minimal residues	Minimizes cleaning requirements
Packaged in a metal container with lid and self-adhesive pad on the underside	Easy to affix to any convenient surface
Suitable for both lead-free and Sn-Pb processes	Versatile, eliminates need for redundant products