

NC601 Power Core Wire Solder

Introduction

NC601 is an excellent rosin based no clean wire solder for soldering through-hole and surface mount assemblies. NC601 flux is formulated to provide clear, colorless residue, maximum activity, and low smoking with a mild odor.

Attributes

- Excellent cosmetics and a clear flux residue.
- Superior activity offering good solderability on all surface finishes.
- Excellent spread and fast wetting.

Wire Solder Alloys	Diameters	Flux Content
SN100C	0.015 to 0.125 inches	2 to 3% wt
SAC305	0.020, 0.032, 0.062 inches	2 to 3% wt

Compatible Products

NC120, NC160, NC165 liquid fluxes. NC32, NC26, NC27 gel fluxes. TTC100C tip tinner.

Storage and Handling

- Shelf life is 5 years when stored between 50 to 90 °F (10 and 32 °C) in a standard warehouse or office environment.
- Store inside of the original packaging to prevent contamination from dust or moisture.

Application

NC601 Power Core wire solder is suitable for use in any electronic hand soldering application. NC601 Power Core wire solder is ideal for difficult to solder metals such as brass, nickel and oxidized copper.

Parameter	Setting	
Soldering iron temperature	370 - 425 °C (700 - 800 °F)	
Angle	45 to 60 degrees to the surface	

These parameters are general guidelines. The optimum settings may be different depending upon the process, equipment, components and circuit boards.

Cleaning

After heating, no-clean flux residues are designed to be "safe" and do not need to be removed from the circuit board. If removal of the flux residues is desired, then a commercial cleaning agent should be





used. Several commercial cleaning agents have been tested and found to be effective. Please contact your cleaning chemical supplier for details.

Safety

Wear appropriate gloves and safety glasses when using wire solder. Avoid breathing fumes, especially during soldering. Follow the guidelines in the Safety Data Sheet (SDS).

J-STD-004 and J-STD-006 Standards	Test Method	Result
J-STD-004 classification	J-STD-004 methods	ROL0
Visual appearance	Visual	Clear colorless flux residue
Flux content	IPC 2.3.34.1	2.0 to 3.0% wt
Solder pool	IPC 2.4.49	Excellent spreading and wetting
Flux residue dryness	IPC 2.4.47	Tack free
Halide ion content (Br ⁻ , Cl ⁻ , F ⁻ , I ⁻)	IPC 2.3.28.1	0.0 % wt
Halogen content (Br and Cl)	EN 14582, IPC 2.3.28.1	0.0 % wt
Halide by silver chromate	IPC 2.3.33	No halides detected
Fluoride by spot test	IPC 2.3.35.1	None detected
Copper mirror	IPC 2.3.32	Low activity
Copper corrosion	IPC 2.6.15	No corrosion
Surface Insulation Resistance (SIR)	IPC 2.6.3.7	Pass > 1.00E+08 ohms
Electro Chemical Migration (ECM)	IPC 2.6.14.1	Pass

