

TIP TINNER / CLEANER

TTC1

Multicore TTC1 is a speedy and effective product for cleaning and re-tinning de-wetted soldering irons that cannot be re-tinned by sponges, pads or rosin-cored solder wire.

- Rapidly re-tins badly oxidised soldering irons
- Activators thermally decompose
- Minimal residues
- Alloy meets international purity standards

Multicore TTC1 is a small block of electronics grade Sn60 solder powder and flux compacted into the shape of a thick disc. It is packaged in a metal container complete with lid and self-adhesive pad on the underside so that it can be readily affixed to any convenient surface.

APPLICATION NOTES

Multicore TTC1 should be used when soldering iron bits become oxidised and cannot be re-tinned using cored solder wire or solder and flux employed in the normal assembly process.

The soldering iron should be at normal working temperature and loose debris should be wiped from the surface. It should then be wiped gently across the surface of the TTC1 to produce local melting. There is no need to use a scrubbing action or undue pressure. If the iron is too cool (<220°C), residue inactivation cannot be assured. If it is too high (>450°C) re-tinning may be impaired. After re-tinning, the soldering iron bit should be wiped as normal on a damp sponge. It will then be ready for re-use.

Multicore TTC1 should not be used as a fluxing system for the regular assembly process.

PRODUCT SPECIFICATION

Multicore TTC1 is a mixture including electronic grade solder powder and a unique fluxing system. The flux shows very high activity to clean heavily oxidised metal surfaces such as copper and iron plated soldering iron bits. It is formulated to decompose completely into inert components when exposed briefly to soldering temperatures. Consequently, the residues left after a normal bit re-tinning cycle are compatible with modern No Clean soldering processes.

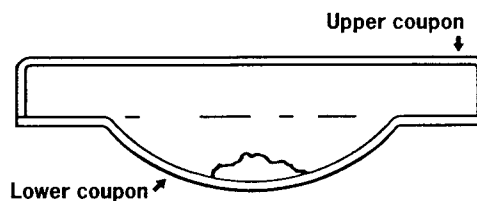
CORROSION TESTS

Multicore Tip Tinner/Cleaner passes the corrosion tests to DTD 599A, BS 5625, QQ-S-571E and Japanese JIS Z 3197 1986 copper mirror corrosion tests.

The tests were carried out in the following manner:

UK Ministry of Defence DTD 599A
Non-corrosive flux for soft soldering specification
Appendix II corrosion test

Two pieces of copper foil, one 2" x 2" the other 2" x 2 1/2" were polished with fine abrasive carborundum paper and degreased. The 2" x 2" copper square was dished and the other given a 1/4" bend each side to make a 2" square "U-shaped coupon, 0.06g of Multicore Tip Tinner/Cleaner was placed in the dished coupon and the "U"-shaped coupon was placed over the top and clamped together.



The assembly was placed in a fume cupboard and shielded from draught. A small Bunsen flame was placed beneath the assembly for the minimum time to completely melt the solder alloy in the Multicore Tip Tinner/Cleaner. Immediately the test pieces had cooled they were separated and placed in a humidity cabinet 95% RH at 22°C for 24 hours. After this time, both panels were examined by X100 microscope for signs of corrosion. There was no evidence of corrosion on the lower or upper coupons.

British Standard 5625 for soft soldering fluxes
5.2 Corrosion Test on flux residues

The corrosion test on Multicore Tip Tinner/Cleaner was carried out according to the specified method. 0.08g of Multicore Tip Tinner/Cleaner was taken for each copper test panel. The test panels were heated at 235°C for the minimum time to completely melt the solder alloy then given a dwell time of 5 seconds. After cooling the panels

were conditioned at 40°C, 91-95% RH for 3 days. The panels were inspected under X10 microscope for signs of corrosion. There was no evidence of corrosion.

American Federal Specification QQ-S-571E /

Japanese JIS Z 3197: 1986 specification

4.7.9 Effect on copper mirror /

6.6.2 Corrosion test by copper mirror

Preparation of Multicore Tip Tinner/Cleaner residue as 35% solution in demineralised water.

10g of Multicore Tip Tinner/Cleaner was weighed into a 50ml borosilicate glass beaker. The beaker containing the Multicore Tip Tinner/Cleaner was immersed up to a depth of 1" in molten solder held at a temperature of 400°C for five minutes, with stirring using a glass rod, until all fuming had stopped. The remaining residues and molten solder alloy were allowed to cool and then extracted with water. The solids content of the residue solution was adjusted by evaporation at 105°C in an air circulating oven.

This solution was used in the manner outlined in the specification against 35% solution of WW rosin and constitutes a satisfactory pass.

PACKAGING

Multicore TTC1 blocks have a net weight of 15g (0.5oz) and are supplied in cartons of 10.

HEALTH AND SAFETY

WARNING: The following information is for guidance only and users must refer to the Material Safety Data Sheet relevant to Multicore TTC1 before use.

Fume Hazards and Precautions: Avoid inhaling the fumes produced during use. These are irritating to the respiratory system.

Protection and Hygiene: Lead is harmful if absorbed into the body through ingestion. Eating, drinking and smoking should not be permitted in the work area. Hands should be washed with soap and warm water after handling TTC1, especially before eating. Keep out of reach of children.



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