

$\mathsf{TTC}\mathsf{-}\mathsf{LF}$

May 2007

TIP TINNER/CLEANER

PRODUCT DESCRIPTION

Multicore TTC-LF 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. Multicore TTC-LF is a small block of electronics grade lead free solder powder and flux compacted into the shape of a thick disc, applicable for both lead and lead free applications. 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.

FEATURES AND BENEFITS

- Lead Free
- · Rapidly re-tins badly oxidised soldering irons
- Activators thermally decompose
- Minimal residues
- Applicable for both lead free and Sn-Pb processes
- Alloy meets international purity standards

APPLICATION NOTES

Multicore TTC-LF 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 its surface. It should then be wiped gently across the surface of the TTC-LF 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 TTC-LF should not be used as a fluxing system for the regular assembly process.

TYIPICAL PROPERTIES

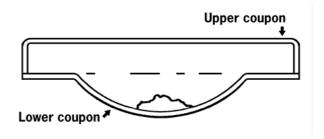
Multicore TTC-LF is a mixture including electronic grade solder powder and a unique fluxing system. The flux shows very high activity to clean heavily oxidised metal surfaces such as copper and iron plated soldering iron bits. It is formulated to decompose completely into inert components when exposed 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 TTC-LF passes the corrosion tests to DTD 599A, BS 5625 copper mirror corrosion tests. The tests were carried out in the following manner:

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

Two pieces of copper foil, one 2" x 2" the other 2" x 2½" were polished with fine abrasive carborundum paper and degreased. The 2" x 2" copper square was dished and the other given a ¼" bend each side to make a 2" square "U-shaped coupon, 0.06g of Multicore TTC-LF 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 TTC-LF. 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 TTC-LF was carried out according to the specified method. 0.08g of Multicore TTC-LF 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 and 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.

PACKAGING

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

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

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