



Multicore[®] MP200 RWF

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REWORK AND DCA FLUX

MP200 RWF is a halide free tacky flux designed for use in a wide range of electronics assembly and rework processes.

- Sufficient activity to deal with different component solderability
- Compatible with Multicore[®] MP200 solder paste
- Good tack force to assist flip chip attach
- Supplied in syringes or cartridges for application by dispensing.

APPLICATIONS

Recommended for rework processes on assemblies build with Multicore[®] MP200 solder paste.

RECOMMENDED OPERATING CONDITIONS

There are many applications for this product and users may find that their own process requires particular conditions. The following information can therefore be for guidance only.

REWORK: The main function of the flux is threefold. It provides a thermal pathway from the heat source to the workpiece, ensuring that it is evenly heated. The viscous fluid protects metal surfaces from rapid oxidation at soldering temperature. It breaks down surface contaminants to allow solder spread. On tin/lead surfaces, this may be a purely physical effect causing oxide skins to flow away from the molten coating but chemical dissolution may also be required.

Where a component is to be soldered into place for the first time, the alloy for the fillet may be provided by the fusible coating on the PCB and to some extent, on the component termination. The PCB may be of conventional design or it can be specially fabricated with a flat, thick solder coating (Solid Solder Deposition, SSD). In either case, MP200 RWF is a suitable product and it will provide a sufficiently tacky surface to hold the component in place.

When a component is to be soldered to a board having little or no fusible coating, MP200 RWF will clean the surface to be joined. Solder for the joint is supplied by wire which may be solid or flux cored. If flux cored wire is used, it is recommended that Multicore[®] X39 is selected since the residues are minimal and totally compatible with MP200 RWF.

Where components have been removed from a PCB, it is important to prepare the site for the replacement device in order that the resoldering process can be carried out efficiently. Excess solder should be removed from the PCB with Multicore No Clean Desoldering Wick and areas showing abnormally high levels of oxidation may benefit from pretinning.

In all cases, a variety of heating methods may be used to produce a solder joint with this product. These include soldering irons, hot gas and hot bar devices, condensation reflow and IR/convection reflow. Specialist tools and workstations are available to assist operators but skill will often be required to adapt these to particular situations. MP200 RWF is tolerant of a wide range of temperature profiles and any residues left after reflow will be hard, clear and non-tacky.

DCA: MP200 RWF is ideal for direct chip attach applications, for example flip chip. In this case MP200 RWF should be doctor bladed into a reservoir of appropriate depth and the chip presented to coat the solder bumps prior to placement. The tack associated with MP200 RWF will then hold the chip in place ready for reflow, although care should always be taken when handling fragile assemblies such as these. The reservoir depth will be governed by many process considerations, but especially the bump diameter: good results have been obtained with 100 µm bumps by using a depth of 35 µm.

TECHNICAL SPECIFICATION

The following Table summarises typical product properties. Full details of test methods are available on request.

FLUX PROPERTIES	
TEST	MP200 RWF
Acid Value, mg KOH/g total flux	115
Brookfield Viscosity (cP)	400,000
Tack Force (g mm ⁻¹)	2.0
Flash point (°C)	124
Flux Classification J-STD-004	ROLO
Copper Mirror Test	Pass
Corrosion Test *) IPC-SF-818	Pass (10 days)
Chromate Paper Test	Pass
SIR Test (without cleaning) *) GR-78-Core J-STD-004	Pass Pass
Electromigration Test *) (without cleaning) Bellcore GR-78-CORE	Pass

*) tested with suitable alloy

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STORAGE

MP200 RWF should be stored at room temperature. Shelf life is six months from date of manufacture.

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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