Technical Data Sheet

LOCTITE HF 108 RWF

June 2016

PRODUCT DESCRIPTION

LOCTITE HF 108 RWF provides the following product characteristics:

Technology	Flux gel
Application	Pb-free soldering
Reworkable	Yes

LOCTITE HF 108 RWF is a halogen-free flux gel for rework processes in conjunction with HF108 solder paste and can be used wherever halogen-free processing of printed circuit boards is required. It is recommended for consumer and communications electronics applications and general electrical soldering applications.

FEATURES AND BENEFITS

- Sufficient activity to deal with different component solderability.
- Halogen-free flux: passes IC with pretreatment IPC-TM-650 2.3.34/EN14582.
- Halogen-free flux classification: ANSI/J-STD-004 Rev. B for a type ROL0 classification.
- Compatible with C400 flux halogen free cored solder wire product range.
- Supplied in syringes for ease of manual dispensing.

TYPICAL PROPERTIES

Flux Gel Typical Properties

Halide Content, %	<0.005
Acid Value, mg KOH, g	130
Brookfield Viscosity mPa·s (cP)	220,000

DIRECTIONS FOR USE

Rework:

- The main function of the flux is threefold:
  1. It provides a thermal pathway from the heat source to the work piece, ensuring that it is evenly heated.
  2. The viscous fluid protects metal surfaces from rapid oxidation at soldering temperature.
  3. It breaks down surface contaminants to allow solder spread.
- 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, LOCTITE HF 108 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, LOCTITE HF 108 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 the low residue halogen-free product C400 is selected since the residues from this material are minimal and totally compatible with LOCTITE HF 108 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, IR and convection. Specialists tools and workstations are available to assist operators but skill will often be required to adapt these to particular situations. LOCTITE HF 108 RWF is tolerant of a wide range of temperature profiles and any residues left after reflow will be hard, clear and non-tacky.

RELIABILITY PROPERTIES

Test	Specification	Results
Copper Plate Corrosion	ANSI/J-STD-004b	Pass
Copper Mirror Corrosion	ANSI/J-STD-004b	Pass
Chlorides & Bromides	ANSI/J-STD-004b	Pass
Surface Insulation Resistance (without cleaning)	ANSI/J-STD-004b Telcordia GR-78-Core	Pass Pass
Flux Activity Classification (without cleaning)	ANSI/J-STD-004b	ROL0

PACKAGING

Containers: LOCTITE HF 108 RWF is supplied in:

- 10cc cartridges
- 30cc cartridges

Other forms of packaging are available on request.

Other packaging types may be available on request; please contact your local technical service helpdesk for assistance.

Storage:

It is recommended to store LOCTITE HF 108 RWF at 25°C. Shelf life is 12 months from date of manufacture.

DATA RANGES
The data contained herein may be reported as a typical value and/or a range. Values are based on actual test data and are verified on a periodic basis.

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

Not for Product Specifications
The technical information contained herein is intended for reference only. Please contact Henkel Technologies Technical Service for assistance and recommendations on specifications for this product.

Conversions
(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Note
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Reference N/A