

Datasheet revision 1.1

www.HMTsolder.com

# Liquid Flux Organic Acid Water-Soluble

#### Product Highlights

**HMT8-LF** is a Water-Soluble flux with a high activity, Neutral organic acid (OA) foam flux formulated for difficult-to-solder surfaces where activated rosin fluxes and less active OA fluxes cannot be used. This flux combines a unique activation system with a special no-polyol base that is compatible with all solder masks, does not leave post-solder white residue, and is an ideal choice for high volume soldering operations. The solderability and cleanability of **HMT8-LF**, along with excellent foaming characteristics and heat stability, provide a moderately low "solids" flux adaptable to a wide variety of board styles, size and thickness.

#### **Product Benefits**

- Excellent Surface Wetting
- Excellent for Copper and difficult-to-solder metals including Alloy 42, Alloy 51 and Nickel alloys
- Compatible with Sn/Pb and Lead-Free Solders.
- May be applied in either foam or spray systems

Test J-STD-004 or other	Test Requirement	Result
requirement (as stated)		
Visual	IPC-TM-650: 3.4.2.5	Clear and Free from precipitation
Conflict Minerals Compliance	Electronic Industry Citizenship Coalition (EICC)	Compliant
REACH Compliance	Articles 33 and 67 of Regulation (EC) No 1907/2006	Contains no substance >0.1% w/w that is listed as SVHC or restricted for use in solder materials.
Specific Gravity	N/A	$0.85 \pm 0.01$
Density	N/A	6.95 lb/gal
Acid Value	N/A	43.5 ± 6.5
Solids Content	N/A	17% ± 0.1
Halide Content	N/A	3.10%
Flash Point TCC	N/A	11.6°C/53°F

### **Specifications and Test Results**

# **Product Use Guidelines**

**HMT8-LF** may be applied by foam, spray, or wave application. The optimum topside PCB preheat temperature is 88-116°C/190-240°F. Residues are completely water-soluble and can be removed in batch or in-line aqueous cleaning systems. Water temperature of 49-60°C/120-140°F is recommended for optimum results.

For optimum results, use the following guidelines:

- Make certain that the PCB surfaces are free from impurities.
- Maintain consistent foam head by narrowing the flux chimney or using dual flux stones.
- Add fresh flux to maintain proper flux level in flux tank.
- Replace the flux daily unless a sealed, self-contained system is used, such as in spray fluxing system.
- For foam fluxing, flux properties can be maintained by monitoring the specific gravity. Controlling the acid value is the most accurate measure and recommended by using a titration kit.

# Storage and Shelf Life

Product should be stored in original sealed containers below 50°C. Shelf life under stated conditions is (2) years.

Packaging

Container Sizes 1-gallon container, 5-gallon pail, 55-gallon drum, Flux Pens

## Health and Safety

**HMT8-LF** is a flammable product and should be handled with care and the normal precautions taken when working with chemical products. Recommended handling procedures are provided in the SDS.

Please refer to the Safety Data Sheet (SDS) before use. Safety data sheets can be found at www.hmtsolder.com

This data is based on information that the manufacturer believes to be reliable and offered in good faith. In no event will HMT be responsible for special, incidental and consequential damages. The user is responsible to the Administrative Authorities (regulations for the protection of the Environment) for the conformity of his installation.

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