



**FCT Assembly**  
LEADERS IN TECHNOLOGY

# 152HF Flux

## Halide Free Water Soluble Flux

### Description

152HF is a halide free, water soluble, liquid flux formulated for producing defect free assemblies in lead free wave soldering processes employing water cleaning. It provides excellent ionic cleanliness after water cleaning and has been formulated to reduce foaming in the wash process. 152HF is also suitable for surface mount assembly soldering operations.

### Application

152HF is a low smoking, foam flux. Using moderate airflow rates, its fine-bubble foam head is fast breaking and recovers rapidly for effective coverage at high production speeds. This active flux will produce bright shiny solder connections. The residues wash off easily to very low levels of ionic contamination. Water washing can be done without the use of rinse aids with little or no foaming. Local regulations may require pretreatment to raise the pH to remove dissolved lead from water effluent.

### FLUX CONTROL:

The specific gravity of the flux should be maintained between 0.92 and 0.94 g/cc through additions of FT-100 Flux Thinner. The amount of flux to be applied in foaming applications should be between 800 - 1300 micrograms of solids per square inch and spray application should be between 475 - 850 micrograms per square inch.

### CONVEYOR SPEED:

The ideal conveyor speed is dependent on the type of board and preheat requirements. A speed between 3.5 to 6.5 feet will suit most applications.

### PREHEAT:

A topside temperature between 80 - 110 C is recommended. A bottom side temperature should be 35 C higher than the topside.

### SOLDER TEMPERATURE:

A solder temperature between 240 – 255 C should be maintained for 63/37. A solder temperature between 250 - 265 C should be maintained for SN100C LEAD FREE SOLDER.

### CLEANING:

All ingredients in 152HF are completely soluble in water. No soap or saponifiers are required to remove residues. It is recommended that the temperature of the water wash is maintained above 100°F to ensure efficient removal. A final rinse with de-ionized water will ensure maximum cleanliness.

### Flux Data

Appearance:	Clear to light amber
Density:	0.91 – 0.94 g/mL
Acid number:	95 – 100 mg KOH / gram
PH (100%):	3.5 – 4.0
Silver chromate:	Pass, no color change
Halide content:	0% (halide free)
Solder wetting:	Positive, good spread
Copper mirror:	High activity
J-STD-004 class:	ORH0

### Packaging

152HF Halide Free Flux is offered in the following container sizes

- 55 gallon drum
- 5 gallon pail
- 1 gallon jug

### **RoHS Compliance**

FCT 152HF Halide Free Flux meets the requirements of RoHS (Restriction of Hazardous Substances) Directive, 2002/95/EC Article 4 for the stated banned substances.

### **Health and Safety**

Refer to the MSDS for guidance on safety and health issues.