



Technical Bulletin

WS220 Reflow Oil

I. Description:

WS 220 REFLOW OIL is a low viscosity, non-foaming and completely water-soluble fluid for oil fusing or leveling. WS220 REFLOW OIL is stable at leveling and fusing temperatures thus minimizing carbonization. WS220 REFLOW OIL is a stabilized oil and may require some initial break in or. Alternatively, add some spent oil or some flux to hasten the break in period. WS220 works well with Hot Oil leveling machines and is effective as a dross blanket in horizontal hot air leveling machines.

Benefits

1. Economical Reflow Oil
2. Long life
3. Excellent rinseability
4. Low VOC content (<0.5%)

Application

HO 351 FUSING FLUX is applied to clean solder-plated printed circuit boards and allowed to drain and dry for a few minutes. The boards are then allowed to immerse horizontally in a bath of WS220 REFLOW OIL kept at 400 - 540F until the plated surface is fused. After attaining a bright fused surface, the board should be cleaned by washing in hot water. DI water is recommended for final rinsing to lower ionic contamination. Rinse aids can also aid in reducing ionic residues if necessary.

II. Operating Parameters

Make-Up	100% WS220
Temperature	400 - 540F (200 - 280C)
Immersion Time	2-5 seconds. Depends on boards. Until the plated solder reflows.
Process	Batch
Agitation	Not necessary
Ventilation	Advised
Tanks	Stainless Steel
Racks and Baskets	Not applicable
Heaters	Stainless Steel
Filtration	Not necessary

III. Physical Properties

Specific gravity	1.13 – 1.15
Appearance	Clear-Amber liquid
pH	Neutral
Odor	Mild
Flash Point	550 F

IV. Control Procedures

Consumption of oil is normally limited by drag out. There is no other way of controlling or monitoring the quality of the reflow oil. Temperature and pH (from the Hot Oil Flux) degrade reflow oils.

V. Analysis

Not applicable.

VI. Safety and Storage

WS220 should be handled with care. Avoid open flames. Do not store in direct sunlight, high temperature or below freezing.

VII. Waste Treatment

Spent reflow oils should not be bled into waste treatment systems-especially resin columns and filtration units. Normally, the spent oil is pH neutralized with caustic soda and sent to a hazardous materials waste handler for fuel blending. Consult with local officials for further waste disposal regulations.

Please ask a Florida CirTech technical sales rep. for more information regarding waste treatment of this chemistry and our complete line of waste treatment line if additional help or information is desired.

VIII. Miscellaneous

Packaging comes in 5-gallon pails and 55-gallon drums. Consult MSDS sheet for additional information.

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