# Water Soluble Liquid Flux

#### **Features:**

- Non-Spattering Formula - High Activity and Excellent Wetting - VOC-Free - Compatible with Most Base Metals

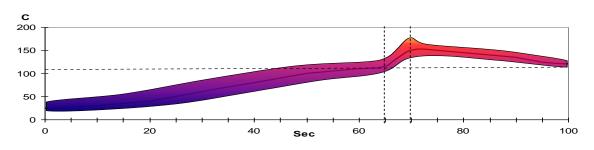
#### **Description:**

WS730 is a water-based, high activity liquid flux designed to offer low-spattering and excellent wetting, even to difficult-to-solder parts. WS730 is formulated for a variety of electronic, electrical and industrial applications, including wire, cable, and terminal lead tinning and soldering, flat and round wire fabrication, and semiconductor and component lead tinning. WS730 will solder to copper, beryllium-copper, nickel, alloy 42, alloy 51, nickel, brass, some steels and other base metals. The broad activity range of WS730 makes it an excellent choice for tin/lead, tin/silver, tin/bismuth, indium and other solder alloys.

# **Application:**

- WS730 can be used in dipping, spraying, brushing, swabbing, and many other fluxing operations. For spraying, WS730 is ready to use directly from its container, no thinning required. When spray fluxing, it is imperative that proper flux coverage and uniformity be achieved and maintained. A dry flux coating of 500 to 1500 micrograms per square inch is recommended as a starting point.
- When nitrogen sealed wave solder equipment is used, it is generally necessary to apply slightly more flux than normal as a result of excess drying due to the extended length of the equipment.

# Thermal Profile:



RATE of RISE	PROGRESS THROUGH	PCB TOP SIDE TEMP	COOLDOWN
2-3°C / SEC MAX	66°C - 77°C (150°F - 170°F)	90°C - 125°C (194°F - 257°F)	≤ 4°C
	≤ 40 SECONDS	JUST BEFORE WAVE	

#### **Cleaning:**

The residues and raw flux are completely water soluble and should be washed in an aqueous cleaning system using deionized or distilled water heated to a recommended temperature of at least 60°C (140°F).

# Handling:

- WS730 has an unopened shelf life of 1 year when stored at room temperature.
- Do not freeze this product.
- WS730 is shipped ready-to-use, no mixing necessary.
- Do not mix used and unused chemical in the same container.
- Reseal any opened containers.

### Safety:

- Use with adequate ventilation and proper personal protective equipment.
- Refer to the accompanying Material Safety Data Sheet for any specific emergency information.
- Do not dispose of any hazardous materials in non-approved containers.

# **Physical Properties:**

Parameter	Value
J-STD-004	ORH1
Visual	Clear, Colorless
Odor	Aromatic (Slightly)
Solids Content	28 % ± 2%
Acid Number	124+/- 11 mg KOH per gram
	flux

Parameter	Value
Specific Gravity	1.0762 (water = 1)
Flash Point	< 10°C
Boiling Point	82°C
pH (1% solution /water)	.071

# **Corrosion Testing:**

Parameter	Requirements	Results
Copper Mirror (24 hrs @ 25°C, 50%RH)	IPC-TM-650-2.3.32	High
Halide Test (Silver Chromate)	IPC-TM-650-2.2.33	Fail

# **Surface Insulation Resistance:**

Reference	Property	Pass-Fail Criteria	Results
IPC-TM-650 method 2.6.3.3 85°C / 85% R.H.	Control coupons	>1E+9 Ω at 96 and 168 hrs	Pass
	Sample coupons – pattern up	>1E+8 Ω at 96 and 168 hrs	Pass
	Sample coupons – pattern down	>1E+8 Ω at 96 and 168 hrs	Pass
	Post-test visual inspection	No dendrite growth or corrosion	Pass

The information contained herein is based on data considered accurate and is offered at no charge. Product information is based upon the assumption of proper handling and operating conditions. All information pertaining to solder paste is produced with 45-micron powder. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of any materials designated. Please refer to <a href="http://www.aimsolder.com/Home/TermsConditions.aspx">http://www.aimsolder.com/Home/TermsConditions.aspx</a> to review AIM's terms and conditions.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

AIM Solder:

WS730