



BOW #342

Low-Residue, No- Clean Soldering Flux

Product Description

Bow #337 Low Residue, No-Clean flux is a specially formulated low-solids flux free of any halides, resin, or rosin. This flux was designed for soldering high quality electronic printed circuit boards (PCBs), such as, through-hole, mixed technology, and surface mount assemblies while eliminating the need for a post cleaning operation. **Bow #337** Low-Residue No-Clean is formulated for foam or spray applications as supplied.

Features and Benefits

- Excellent surface wetting
- Eliminates the need for cleaning solder boards
- May be conformal coated without post-solder cleaning
- Can be used with lead free solder
- Conforms to IPC ANSI J-STD-004, Type ORL0

Applications

For wave solder applications **Bow #342** Low-Residue No-Clean flux may be applied by foam, spray or wave application. The optimum top side PCB preheat temperature recommendation is 200-240°F/93-115°C. Too low a preheat setting is indicated by post-solder residues on PCBs that look like water stains. A solder-bath temperature of 480°F±20°F is recommended for optimum result.

For optimum soldering results, use the following guidelines:

1. Make certain that the PCB surfaces are free of oil, grease, or other impurities.
2. Maintain a consistent foam head by narrowing the flux chimney, or using dual flux stones.
3. Add fresh flux to maintain proper flux level in flux tank.
4. Replace the flux daily unless a sealed, self-contained system is used; such as in a spray fluxing system.
5. Regularly clean fluxing equipment. Never leave foaming stone in flux when pressure is not applied.
6. Clean fluxing stone in **Bow #392-FT** flux thinner.
7. When foam fluxing, flux properties can be maintained by monitoring the specific gravity. However, control by checking the acid value is recommended as the most accurate measure.
8. Add **Bow #392-FT** flux thinner when needed.

Bow #337 is also formulated for use in manual soldering applications for electronic assemblies. A soldering iron temperature between 315-400°C/600-750°F is recommended for optimum results. Apply flux to area that is being soldered. Post-soldering residues are water-cleanable and can be removed with DI, distilled, or RO water.

Physical Properties

Specific Gravity	0.825 ± 0.01 @ 20-25°C/68-77°F
Color	Water white & clear
Halide Content	None
Acid Value	40.0 ± 3.0
Fluoride Test	Passed, No Fluoride Content
Silver Chromate Paper Test	Passed, No Chloride Content
Percent Solids	4.7 ± 0.1
Copper Mirror Corrosion Test	Passed
Flash Point (TCC)	11.7°C/59°F

Safety Precautions

Bow #342 No-Clean flux is a flammable product and should be handled with care and the normal precautions taken when working with chemical products.

When soldering with **Bow #342**, adequate ventilation should be provided. Avoid contact with eyes, skin, and mucous membranes. Always wear NIOSH approved safety equipment when working with chemicals. Store in plastic containers away from heat.

Store flux in an area with controlled temperature between 18°C/64°F-25°C/77°F.

Refer to Material Safety Data Sheet (MSDS) for additional safety information.

The information contained herein is based on data consideration to be accurate and is intended for use by persons having technical skills at their own discretion and risk. Since conditions of use are outside of Bow Electronics control, we cannot assume liability for results obtained or damage incurred due to misuse, nor can we assume customer liability.

1 Crossman Road, Sayreville, NJ 08872

Tel: 732-316-2100 Fax: 732-316-1185

Toll Free: 800-526-4577

www.solders.com

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