

# ZACLON LLC

## ZACLON® AB FLUX

### *Non-smoking Top Flux for Special Applications*

Zaclon AB Flux is a fume free flux; it does not contain ammonium chloride. It is a proprietary mixture of zinc chloride and potassium chloride, and is used as a kettle top cover to prevent the formation of zinc ash and as a fluxing agent to recover the zinc metal from kettle ash skimmings. The lack of ammonium chloride makes the flux a low activity material, but also enables very long flux life and low consumption. Flux consumption can be 50% less than with normal triple salt fluxes.

### **ZACLON AB FOR WORKING ASH TO REMOVE ZINC METAL:**

To recover zinc metal from ash skimmings when removing the ash from the kettle, add a small amount to the ash after it has been skimmed to a small area of the kettle surface and stir the ash for a short time. Too much working of the ash can result in iron hydroxides in the ash reducing to iron and contributing to dross formation. Many plants skim the ash to a small containment area in one corner of the kettle or use an ash box.

The amount of Zaclon AB needed will vary due to the kettle size. This can be as little as eight ounces to as much as two to five pounds for large kettles. The Zaclon AB after melting and being mixed in the ash will flux the zinc metal and allow better release of the metal into the molten kettle zinc. The use of Zaclon AB in the zinc ash on removal from the kettle often results in reduction of zinc ash from 10% to 30%.

### **TOP FLUX APPLICATIONS:**

Zaclon AB is an appropriate top flux where little actual oxide removal is needed. It is often used as a top flux in combination with a more active preflux such as Zaclon High Speed 50 °Bé; the combination will give a foamy, low viscosity top flux even at temperatures well below normal galvanizing ranges. This combination is especially popular for application of tin/lead and tin/zinc terne coatings, and has been used for 100% tin application as well in hot dip steel sheet lines.

Applications on hot dip sheet galvanizing lines are also possible, normally with preflux solution Zaclon W on continuous/sheet by sheet lines, though applications with Zaclon CS, Zaclon F, or even Ammonium Chloride have been tried. The level of activity is determined by each individual line's parameters and incoming steel.

Finally, direct applications for after fabrication galvanizing shops often involve blends of Zaclon AB with higher activity top or prefluxes; this is particularly useful for cast iron work, as it allows good preheating through the top flux. The preheating allows shorter kettle time, decreasing zinc pick-up and dross generation while also cleaning the work in the flux layer.

FOR MORE INFORMATION on this or other Zaclon products for galvanizing, please contact Zaclon Customer Service at 1-800-356-7327, or come and see us on the Web at [www.zaclon.com](http://www.zaclon.com).

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