

# SODIUM GLUCOHEPTONATE

## ALUMINUM ETCHING

Preparation of aluminum for anodizing, electroplating or coating requires a thorough cleansing of the surface. In the past, mineral acids vigorously attacked the aluminum surface causing pitting and thus were discarded as cleaners while caustic soda solutions served as improved substitutes. This treatment however, does not sufficiently remove the inert protective film of aluminum oxide which would permit the full brightening of the aluminum surface. Another shortcoming of using caustic soda alone for aluminum etching and/or cleaning is the scale formation upon the heating coil and the tank.



The addition of sodium glucoheptonate to caustic soda greatly aids the process of aluminum etching and cleaning because it dissolves the aluminum oxide film preventing its redeposition as an oxide scale on the heating coils.

A typical bath varies from 1 to 10 ounces per gallon of alkali with 1-5% of glucoheptonate relative to the dry weight of caustic soda. A suggested mixture would contain 4 ounces caustic soda and 0.12 ounces of sodium glucoheptonate at 160 °F.