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March 3, 1993

E. W. O'Rourke
Process Unit
Metal Preparation Section

This Document contains
2 Pages No. FEB 03 1992

EFFECT OF DIVERSEY 314 IN METHANOL

In our recent talk about the use of Diversey 314 in place of H_2PO_4 as an aluminum component etch, a question arose as to the effect of Diversey 314 on the methanol if, by chance, the components were not rinsed in water before the methanol wash.

A test was carried out in the laboratory with Diversey 314 and a methanol rinse with no intermediate water rinse. The caps were water rinsed after the methanol, dried, and the surface resistance tested and compared with caps cleaned with Diversey 314 in the proper manner. No noticeable difference was found between the surface resistance of the caps immediately rinsed in methanol and the resistance of the caps receiving the proper procedure.

Although there was no change in the surface resistance of the caps, there is a very noticeable change in the methanol. When Diversey 314 is added to the methanol, the following changes occur:

1. A white precipitate immediately "salts out", which is quite noticeable, since it gives the methanol a cloudy appearance. Upon standing, the precipitate will slowly settle to the bottom of the container.
2. The methanol also turns a light yellow color with the addition of Diversey 314. With time, this yellow color changes to a light green color.

Since the appearance of the methanol is changed so readily with the addition of Diversey 314, it will be possible for the operator to tell immediately that he has either skipped the water rinse or has not rinsed the components sufficiently. If Diversey 314 is accidentally introduced into the methanol, the components should be rinsed in water and washed in a fresh solution of methanol. Since it is not certain if the white precipitate would cause difficulties in canning if it were to adhere to the components, the contaminated methanol should be replaced.

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EW O'Rourke

-2-

March 5, 1953

with fresh methanol. The amount of time necessary for a good water rinse before the methanol wash can only be determined through use although the color of the rinse water may be used as a satisfactory gauge.

EA Weakley:bz

EA Weakley
FUELS TECHNOLOGY
ENGINEERING DEPARTMENT

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E. W. O'Rourke
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