

FROM (NAME & LOCATION) J. A. Gloeckner - WCK

DATE : October 18, 1971

SUBJECT : Biphenyl - Correlation of Impurity Levels

REFERENCE : Emery/Stewart 9/27/71

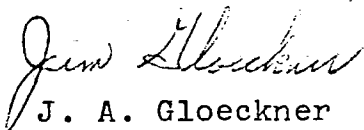
TO : W. Krull - TSD

CC: E. E. Stewart
R. M. Blowers
R. M. McCutchan

The reference memo described GC analysis of fifteen lots of Anniston biphenyl. These lots were representative of material used in Dept. 246 during periods of high and low thermal-chemical stability (TCC). The trace analyses were performed by the Organic Technology department.

Statistical analysis of the trace component concentrations reported showed that the impurity levels in the period of "high TCC were significantly different from those during "low" TCC. This was true for all identified components, for most of the major unidentified components and for the total impurity concentration. The confidence level for the comparisons was 90% or greater with most cases being at the 95% level.

While the above analysis cannot tie any single component or group of components to the problem, it could be cause enough to look further at the biphenyl as a possible source of product instability.


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