

INTER-OFFICE MEMO **TENNECO CHEMICALS, INC.**

TO H. B. Carr AT Burlington DATE November 14, 1969

FROM F. W. Kanzler AT Burlington COPY TO E. J. Hourihan
G. W. Leach
P. R. Scarito
M. W. Williams
File ✓

SUBJECT FDA (2-Ethylhexanol)
Project No.: 70-001

Reference: Memo to M. W. Williams from
H. B. Carr, dated 11/10/69
and Memo to E. J. Hourihan
from G. W. Leach, dated
10/13/69

The following results were found in response to the requests in the referenced memos:

1. Routine Specification Checks

<u>Test</u>	<u>Spec. Range</u>	<u>Values Found</u>
Specific Gravity	0.8325 to 0.8345 at 20°C	0.830 at 25°C*
Refractive Index	1.4318 ²⁰	1.4296 ^{25*}
Acidity as Acetic Acid	0.01%	0.008%
Lbs./Gal.	6.94 at 20°C	6.92 at 25°C*

*These tests are performed at 25°C in Burlington as opposed to 20°C for the manufacturers specifications. The difference in the results reflects the difference in temperature. The Q. C. Laboratory will grade the raw material as DAR until proper specification ranges have been established for the Burlington conditions.

The tests performed represent the test capability of the Q. C. Laboratory for 2-ethylhexanol at present.

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2. Gas Chromatographic Analysis of Residual 2-Ethylhexanol in Polyvinyl Chloride

An analysis attempt on the gas chromatograph in Burlington showed promising results (to PPM level) with one of the existing columns. Since analysis of 2-ethylhexanol may have to be performed in the presence of other process additives which could result in interference at the analytical point, a literature search was made to find a more efficient column. Several excellent references to more efficient columns were found. A follow-up report will be issued as soon as a column has been prepared and analysis conditions have been established. An infra red spectrum of the 2-ethylhexanol was made on the Burlington infra red spectrophotometer and added to the IR library.

Both Burlington Control Laboratories have the capabilities to assure consistency of quality of 2-ethylhexanol and perform the analysis of residual 2-ethylhexanol in polyvinyl chloride. We will be prepared to support the LOP trials with this antifoam.

Fred W. Kanzler

F. W. Kanzler

FWK/rjl