

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

TO W.C. Champion
 FROM F.W. Kanzler
 SUBJECT MONTHLY PROGRESS REPORT
 February, 1974

AT Burlington
 AT Burlington

DATE February 22, 1974

COPY TO R.J. Eckman
 P. Gawason
 H.R. Horton
 R.A. Lojewski
 W.E. Stewart
 E. Young
 ✓ File

I. ROUTINE ANALYSISA. Raw Material Evaluation

IR Scan	19
Avirol POL-1-S	
Cloud Point	1
% FAS	1
Bottle Polymerization (2 runs @ 4 bottles each)	3
RVCM Storage	
Phenol in Copolymer Storage	6
Styrene Monomer Evaluation	4
2-EHP	
PPG	10
VCM	1
Light End Impurities	
L ₂ O ₂	8

B. In-Process Analyses

Trace Oxygen, Compressor 1	20
" " , " 2	21
" " , " 3	20
" " , " 4	15
" " , " 5	17
" " , " 6	16
COD AI	20
COD FCE	20
% FAS AI	4
% FAS FCE	4

C. Finished Product

Bound Acetate	54
Haze & Gloss	44
Brabender Extruder Gels	12
	320
Total from Section II	32
	320
Total	352

II. SPECIAL TESTING

A. Resin Plant

1. Raw Material

a. Coconut Diethanolamide

The laboratory evaluation of ADS-100 as an alternate for Ninol 1281 has been completed. All test parameters, including heat stability showed equal or well within specification results. Process Engineering was requested to evaluate ADS-100 in the plant. No action has been taken to date.

b. Methocel

Samples of Methocel from shipments which showed low viscosity values when tested in Burlington, were submitted to Dow for viscosity determination. The samples tested by Dow showed little variation from the previously-reported results by Dow. A rerun of the retained samples in Burlington make a technician error suspect for the initially reported values.

Samples for the ferromagnetic contamination round robin, set up by Dow will be shipped from Midland during the week of 2/25/74.

2. In-Process

a. Polyvinyl Acetate Cross-Contamination in BR-501

Samples of this resin type emitted vinyl acetate odors when evaluated by R&D Flemington. Infrared analyses performed showed a vinyl acetate cross-contamination of less than 1% of bound acetate in BR-501. A contamination of vinyl acetate was suspected during the monomer charging procedure and has been corrected. No further cross-contamination has been noted to date in this resin type.

b. Residual VCM

A status report issued, covering the work to date for this continuing evaluation.

c. OVA Monitoring

OVA Monitoring was established throughout the Burlington Resin Plant. Sample areas were established in cooperation with Production and readings were taken on an interrupted basis at all check areas. Furthermore, exposure checks were made during reactor cleaning and at the filter drums.

The monitoring will be expanded to the Compound Plant.

d. Steam Trap Plug

A sample of solids found in the steam trap was analyzed and found to be made up of primarily inorganics such as metals and carbon. However, oleic acid was also found to be present. The results showed a possible contamination of the steam trap with a DHW-80/resin mix. No further verification of the results were made.

3. Finished Product

a. Contamination of T-390 and T-10/5R Shipped to Nixon

A bulk truck load of T-390 was rejected by Nixon for high contamination. Microscopic examination of the contaminants showed presence of angle hair and red pigmented material indicating cross-contamination with compounded material. Two subsequent bulk loads were also rejected, one T-10/5R and one T-390, which showed normal type of contamination, such as burnt or degraded resin, when examined under the microscope.

Sampling procedures and test methods will be reviewed to avoid a reoccurrence of this kind.

B. Compound Plant

1. Raw Materials

a. Lead Analyses

Four samples of lead stabilizers were analyzed for their lead levels.

b. 6903

This program was started via gas chromatographic evaluation of this material to establish a data base for future shipments.

C. Fords Plant

1. Supercryl 100 and 100-H

Test parameters were established and optimized. A total of 18 lot samples were analyzed to date for processability and optical properties.

D. Miscellaneous

1. Bound Acetate Distribution, In-Lot

This program, started during the previous report period, was continued. A status report will issue in the week of 2/25/74.

2. Running Account of Analyses

<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>January</u>
427	367	387	408	343	473

F. W. Kanzler
F.W. Kanzler (jkr)

FWK/jst