

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

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

AT Burlington

DATE January 25, 1974

AT Burlington

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I. ROUTINE ANALYSIS

A. Raw Material Evaluation

IR Scan	25
Avirol POL-1-S	
Cloud Point	1
% FAS	1
Bottle Polymerization	
(1 run @6 bottles each)	1
(2 runs @4 bottles each)	2
RVCM Storage	
Phenol in Copolymer Storage	4
Styrene Monomer Evaluation	4
2-EHP	
PPG	6
Lucidol	22

B. In-Process Analyses

Trace Oxygen, Compressor 1	20
" " , " 2	22
" " , " 3	24
" " , " 4	23
" " , " 5	23
" " , " 6	17
COD AI	23
COD FCE	23
% FAS AI	6
% FAS FCE	6

C. Finished Product

Bound Acetate	38	
Haze & Gloss	53	
Brabender Extruder Gels	90	
Total from Section II		434
		39
Total	473	

II. SPECIAL TESTING

A. Resin Plant

1. Raw Materials

a. Alternate for Ninol 1281

The tests performed on Ninol 1281 and Monamine ADS-100 showed equally effective antistatic properties on polymers coated with either material. A report will issue when delayed heat stability tests have been completed.

b. Lucidol 223M, 2-EHP

One lot of the recent shipment of this raw material showed assay levels below the lower specification range of 40%. A Corrective Action Request was submitted to Purchasing. Lucidol (G. Kuzma) indicated that their Technical Services Group has filed a complaint to Lucidol's Manufacturing. Findings will be relayed to us as soon as available.

c. Ammonium Persulfate

An approximate one year's supply of this initiator was received in Burlington. This was contrary to the six months' maximum allowable storage for this raw material. As a result, half of the shipment will be sent to the Garfield facility for use there.

d. Raw Material Storage Requirements

Storage requirements for all raw materials used in Burlington were reviewed and issued.

1. In-Process

a. Residual VCM

The periodic analysis of residual monomer in resin was continued throughout the report period.

b. Process Engineering Support

(1) Flemington Conversion - Waste Treatment

Samples of copolymer centrifuge effluent water and RVAcM storage sump water were subjected to lime and caustic treatment to determine the addition levels to reach neutralization of the effluents under simulated effluent conditions.

(2) Defoamer Evaluation

A total of six defoamers were evaluated during this report period. One defoamer from Nopco and one from Hercules showed excellent foam breaking and antifoam capabilities during the initial screening tests. Further tests will be performed with latex samples to check filterability and heat stability of the resin when treated with the above defoamers.

(3) Filter Cloth

The standard monofilament cloth (NY76W42) was used to evaluate filterability of sodium lauryl sulfate-based latices. High effluent solids (12.0%) make this cloth type unsuitable for use in the "B" Plant. A similar cloth type, NY76K22, will be evaluated since it showed about half the effluent solids when previously tested during 1738 latex evaluations.

(4) Plastisol

In the effort to de-bottleneck the dispersion resin plant, resins were evaluated, to check the effect of new type atomizers on resin properties. No drastic changes were noted including haze and gloss values.

c. Effluent Plant Support

(1) Raw Sewerage Analysis

Samples of raw sewerage were analyzed for their COD levels in an effort to explain the cause of high COD levels found in the secondary treatment area. It is suspected that resin fines from the recent copolymer lots manufactured with Hormel gelatin may be the cause for the high COD levels.

(2) Dragout Volatiles

Samples from the suspension and dispersion dragout were analysed for their moisture levels in an effort to determine if this resin is saleable.

B. Compound Plant

1. In-Process

A total of seven lead assays were performed on recovered compound samples.

C. Fords Plant

1. Supercryl 100 and 100H

Lot samples of this processing aid will be evaluated for its clarity and processability at the Burlington site. Initial tests centered around the establishment of the proper roll mill conditions. Specifications will be established once sufficient data is available.

D. Miscellaneous

1. TCE in Air

Analyses were performed to determine the TCE levels in both suspension plants. Only the Homopolymer Plant showed any amount of TCE in the air. About 55 ppm were found during the charging of the weigh-tank in this plant.

2. Bound Acetate Distribution, In-Lot

The program to study in-lot bound acetate distribution was started during this report period.

3. Running Account of Analyses

<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
275	427	367	387	408	343

A total of 4,696 analyses were performed in this laboratory during 1973.

Fred W. Kanzler
F.W. Kanzler

FWK/jst