

TENNECO CHEMICALS, INC.

A Major Component of Tenneco, Inc.



TENNECO MANUFACTURING COMPANY

Post Office Box 849
Pasadena, Texas 77501

May 4, 1967

Mr. Gordon Rozand
Tenneco Chemicals, Inc.
Tenneco Plastics Division
P. O. Box 2
Piscataway, New Jersey 08854

Dear Gordon:

Subject: Polymerization in VCM Tank Cars

The recent partial polymerization in tank car NATX 17144 has prompted us to review possible sources of polymerization. As you know, our procedure has been to sample returning cars which showed no pressure or less than 300 pounds heel for oxygen content in the vapor space. Oxygen content of all loaded cars is determined, and no car leaves the Pasadena Plant with oxygen exceeding 0.1 volume per cent oxygen.

After the recent NATX 17144 incident, data on 244 cars returned this year was reviewed. The data, attached, show that about 16% of the returning cars contained oxygen, independent of their returning condition.

The relatively large percentage of returning cars which was found to contain oxygen in spite of having pressure and/or heel indicates that there may be occasional irregularities in unloading procedures, such as pulling a vacuum on the car in error and then back-filling to provide a heel and/or pressure.

To insure against recurrence of polymerization, it is recommended that:

1. Tenneco Manufacturing sample all returning cars for oxygen before and after loading. As in the past, no cars will be shipped containing more than 0.1% oxygen in the vapor.
2. Tenneco Plastics sample all cars received for oxygen before and after unloading.
3. The return heel weight be increased from 300 pounds to 800 pounds.

Very truly yours,

TENNECO MANUFACTURING COMPANY

D. R. Keck
Vice President-Manufacturing

DRK:wm
Attachment

cc: Dr. F. L. Padgitt

Mr. Al Silverberg ✓

COLORITE 005961

SUMMARY OF VCM TANK CAR CONDITION

<u>Car Condition</u>		<u>Number of Cars</u>	<u>Oxygen Found</u>	<u>% by Grouping</u>
<u>Pressure</u>	<u>300 Lb. Heel</u>			
Yes	Yes	18	Yes	15
Yes	Yes	101	No	85
Yes	No	14	Yes	15
Yes	No	79	No	85
No	Yes	3	Yes	30
No	Yes	7	No	70
No	No	5	Yes	22
No	No	<u>18</u>	No	78
		244		

Total cars with oxygen - 40 or 16.4%