VC Misc

UNION CARBIDE

INTERNAL CORRESPONDENCE

CHEMICALS AND PLASTICS • P. O. BOX 8361, SOUTH CHARLESTON, WEST VIRGINIA 25303

To (Name) Mr. R. N. Wheeler
Division
Location South Charleston Plant
Copy to

Date October 9, 1974
Originating Dept. Engineering
Subject History of Vinyl Chloride Production by Union Carbide

Dear Mr. Wheeler:

In response to your question as to when Union Carbide first made vinyl chloride commercially, I am attaching the first page of a report "The Manufacture of Crude Vinyl Chloride." This report is report number 3 in a volume of reports entitled Vinyl Chloride - 1927-1941 Miscellany, Volume I, Engineering Department, Carbide and Carbon Chemicals Company, South Charleston, West Virginia. Unfortunately, the author of the report is not identified, and the report is not dated.

Nevertheless, the attached page indicates that vinyl chloride production by Carbide began in 1929.

Very truly yours,

W. R. Manning

W. R. Manning
Engineering Manager
Vinyl Monomers and Resins

WRM:md

Attachment

CRUDE VINYL CHLORIDE

I. HISTORY:

The first record of the production of by-product vinyl [illegible] The first experimental work on record of the manufacture of vinyl chloride from the hydrolysis of ethylene dichloride in caustic solutions is contained in the report mentioned in the references.

Prior to December, 1929, the demand for vinyl chloride was met by the recovery of by-product vinyl chloride made during the hydrolysis of ethylene dichloride to ethylene glycol. From December, 1929, to July, 1931, short runs were made on the #2 dichloride hydrolysis unit to produce vinyl chloride. This crude vinyl chloride was refined in a small still in building 42. During July, 1931, the vinyl chloride refining still at the Vinylite department was put in operation. The vinyl chloride still in building 42 was dismantled.

Since July, 1931, all of the vinyl chloride used at the Vinylite department has been produced by the hydrolysis of ethylene dichloride in a caustic solution. Sketch 10039 shows the production of vinyl chloride since 1928.

Operating conditions and equipment have often been changed in efforts to determine the most economical process to obtain the best product. A summary of these changes and the results will be given.

The length of time, and frequency that this unit is run is determined by the demand of the Vinylite department. During 1932 and 1933 the unit ran about five days each month.

II. PHYSICAL PROPERTIES:

A. Products:

1. Vinyl Chloride:

Molecular weight	62.42
Specific Gravity at B.P.	.9693
Boiling Point	-13.9°C.
Latent heat of vaporization (calculated)	185 BTU/lb.