UNION CARBIDE

INTERNAL CORRESPONDENCE

UNION CARBIDE CORPORATION • 1730 PENNSYLVANIA AVENUE, N. W., WASHINGTON, D. C. 20006

RECEIVED
JAN 23 1975
R. N. WHEELER

To (Name) R. P. Huffard, Jr.
Division R. N. Wheeler
Location

Date January 21, 1976

Originating Dept.

Answering letter date

Copy to

Subject Polyvinyl Chloride

Earlier this week, Jerry Kenney received a telephone call from the man whom the attached letter is addressed. He asked the following questions:

1. Is Union Carbide closing a dispersion vinyl resins unit?

2. Do we make solvent vinyl resins by a continuous process, and can the resin be stripped of monomers easily?

3. Have we any data on the removal of vinyl chloride contained in water at a few parts per million concentration by use of molecular sieves?

The flow diagram and process information is from a report submitted to EPA and is therefore in the public information category.

Very truly yours,

George J. Hanks, Jr.

GJH:dal

Attachments

UCC
002982

UNION CARBIDE CORPORATION
1730 PENNSYLVANIA AVENUE, N. W.
WASHINGTON, D. C. 20006

January 21, 1976

Mr. Barry Castleman
1738 Riggs Place, NW
Washington, D.C. 20009

Subject: Polyvinyl Chloride

Dear Mr. Castleman:

Attached is a copy of the recent announcement of the planned closing of Union Carbide's dispersion vinyl resins manufacturing unit at South Charleston, W. Va. As I said in our phone conversation, this decision was made purely on a business basis.

I am also enclosing a flow diagram of our solvent vinyl resin manufacturing process. This process cannot be used for polyvinyl chloride homopolymers, but is used for making copolymers of vinyl chloride and vinyl acetate, with the acetate running in the neighborhood of 8-15%. In this process, these monomers are polymerized in an organic solvent in which both reactants and the polymers are completely soluble. A mixture of unreacted monomers, solvent, and polymer in solution leaves the reactors. Unreacted monomer is removed in a stripping process and is recycled. The polymer is precipitated from solution, centrifuged, and then dried using hot air. Unreacted monomer in the polymer-solvent solution fed to the precipitator has an affinity for the solvent. As a result, the dried resin monomer content is below the present detectable limit. Solvents recovered from the process are recycled for reuse.

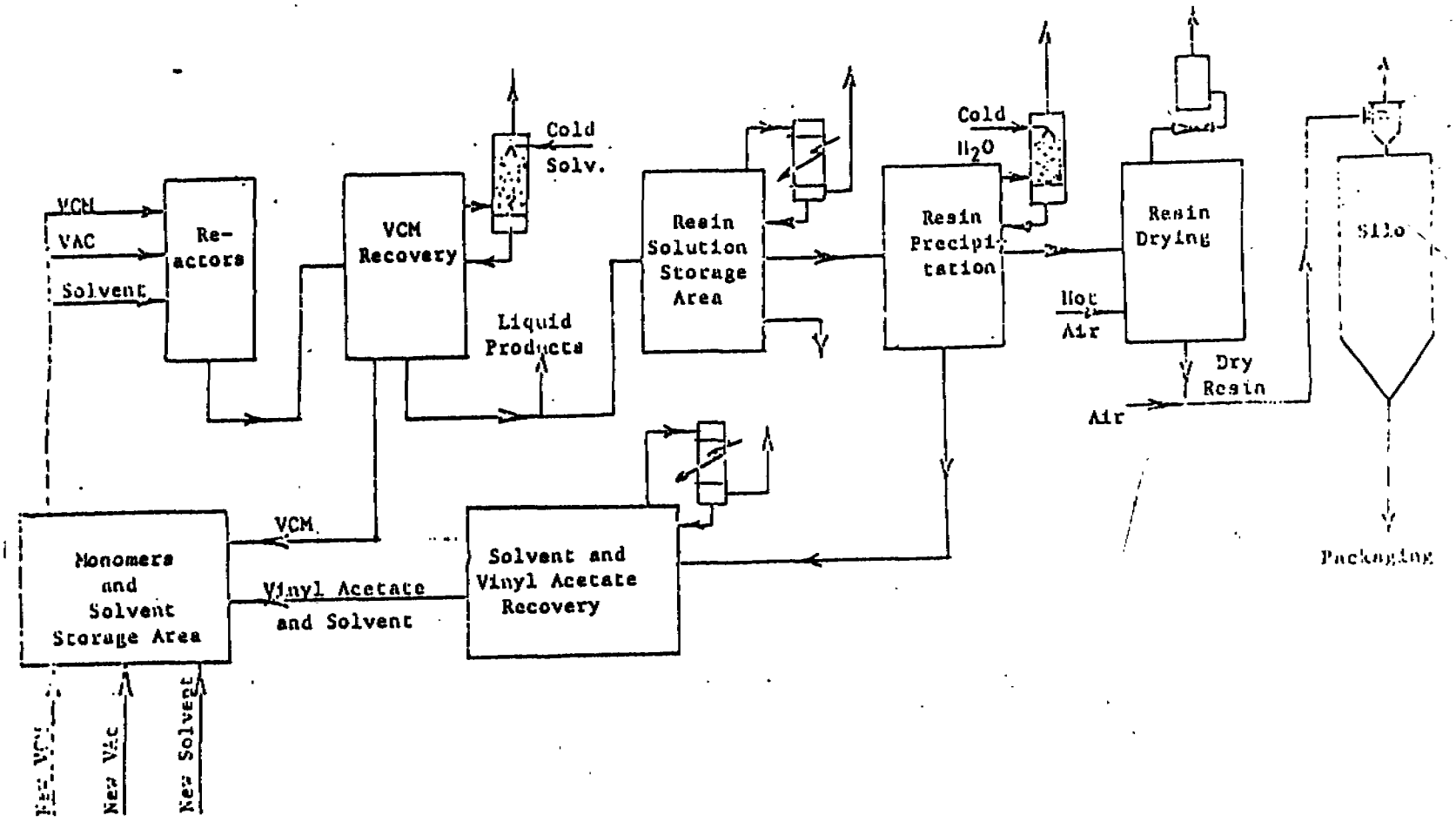
As I mentioned, our Chemicals and Plastics Research Department told me that they had done no work in investigating the removal of vinyl chloride from water through the use of molecular sieves. I will attempt to find out more about their potential applicability in this service, and will get in touch with you when I have any pertinent information.

Very truly yours,

George J. Hanks, Jr.

GJH:dal

Attachments



UNION CARBIDE'S SOLVENT VINYL RESIN PROCESS

AT SOUTH CHARLESTON

Dispersion Resins Shutting Down

Carbide announced this week that we are shutting down our vinyl dispersion resins unit at the South Charleston plant by the end of the year. The facility is located in Building 190 on the Island. About 60 employees are involved and they will be reassigned to other operations when the shut-down is completed.

The decision to discontinue vinyl dispersion resin production is based solely on an analysis of our commercial position which indicates that to remain in this business is not justifiable. The unit has a capacity of 40 million pounds a year which is less than 10 per cent of the domestic industry capacity.

Instead, Carbide has decided to concentrate its support efforts on solution and suspension vinyl resins in which we have a strong market position. Additional capital will be expended for these operations.

Carbide is an industry leader in solution vinyl resins which are produced by a unique solvent polymerization process at both South Charleston and Texas City. These are widely used for solution coatings in cans, house siding, paper, cloth, and high performance maintenance paints.

We also produce a broad line of suspension vinyl resins in a modern production unit at Texas City. These are used in such applications as piping, floor tile, and extruded cellular moldings.

Carbide pioneered and built the first commercial unit for the production of vinyl resins at South Charleston in 1930.

MORE PRODUCTIVE TIMES.....This night shot, with lights reflecting in the Kanawha River, shows our Vinyl Dispersion Resin Unit (Bldg. 190) on Blaine Island at the South Charleston Plant. Carbide announced we will be phasing out our Dispersion Resins business by the end of the year.