

RECEIVED

DEC 01 '86

TO: T. G. Grumbles

Route: _____

FROM: D. T. Plummer

DATE: November 26, 1986

Copy: _____

Interoffice
Communication

SUBJECT: PRELIMINARY INFORMATION FOR C1416 ALKYLATE PMN'S

File: *New*

X-F: _____

PPD-51pt
VISTA

Attached is a crude flow diagram for the production of C1416 dialkylbenzene ("C1416 DAB"), as you requested. Also attached are four sheets containing physical property and composition data for this product and the coproduct C1416 monoalkylbenzene, which under present plans, will be recycled. Kyle provided the data. Below are some suggestions concerning new products.

This is the background information you requested as a basis for discussing premanufacture notices (PMN's) with the Baltimore plant.

1. New Products Requiring Registration:

Benezene, di C₁₃-C₁₇ alkyl derivatives, or Benzene, C₁₃-C₁₇ alkyl derivatives, fractionation bottoms

This product is the C1416 DAB itself, currently not registered (stream 3 in the diagram). This is the primary product of the operation as we see it.

2. New Products Possibly Requiring Registration:

Benzene, C₁₃-C₁₇ alkyl derivatives (mono-and di-)

This would be the crude alkylate (labelled 1) in the diagram. It contains monoalkylbenzenes, dialkylbenzenes and other products like tetralins, naphthalenes, and diphenylalkanes. It is possible, though not likely, that this stream could be isolated and sold.

Benzene, mono C₁₃-C₁₇ alkyl derivatives, or Benzene, C₁₃-C₁₇ alkyl derivatives, fractionation overheads

This would be the predominantly monoalkylate stream, (labelled 2) also containing tetralins at a concentration of 5%-10%. Though the constituent alkylbenzenes are registered (below), it might be better to register the whole stream because of the coproducts contained in it. This stream would be recycled when making C1416 DAB, but could potentially be isolated and sold.

VVV 000009184

Preliminary Information for C1416 Alkylate PMN's
November 26, 1986
Page 2

Benzene, n-tridecyl 123-02-4
Benzene, n-tetradecyl 1459-10-5
Benzene, n-pentadecyl 2131-18-2
Benzene, n-hexadecyl 1459-09-2
Benzene, n-heptadecyl 14752-75-1

C1416 Recycle Paraffins

This stream (labelled 4) may contain enough impurities that it may be worthwhile registering it. It has the potential of being isolated, but it is very unlikely we would ever sell or ship any of it. Though I'm not sure what its composition would be, chances are that all the normal paraffin, branched paraffin and alkylbenzene components are registered.

"DPA Cuts"

Not shown in the diagram, such an intermediate-boiling-stream could arise if we

1. increase chlorination level vs our current plan and
2. isolate it by distillation

The plant should comment on the likelihood of doing this.

3. New Chemicals Not Requiring Registration

C1416 Chlorinated Paraffin (stream 5)

This stream does not have the potential to be isolated and should not require registration.



D. T. Plummer

DTP/hbs

Attachments (5)

cc: (att. #1 only)
PLJ MMG KWR RWS

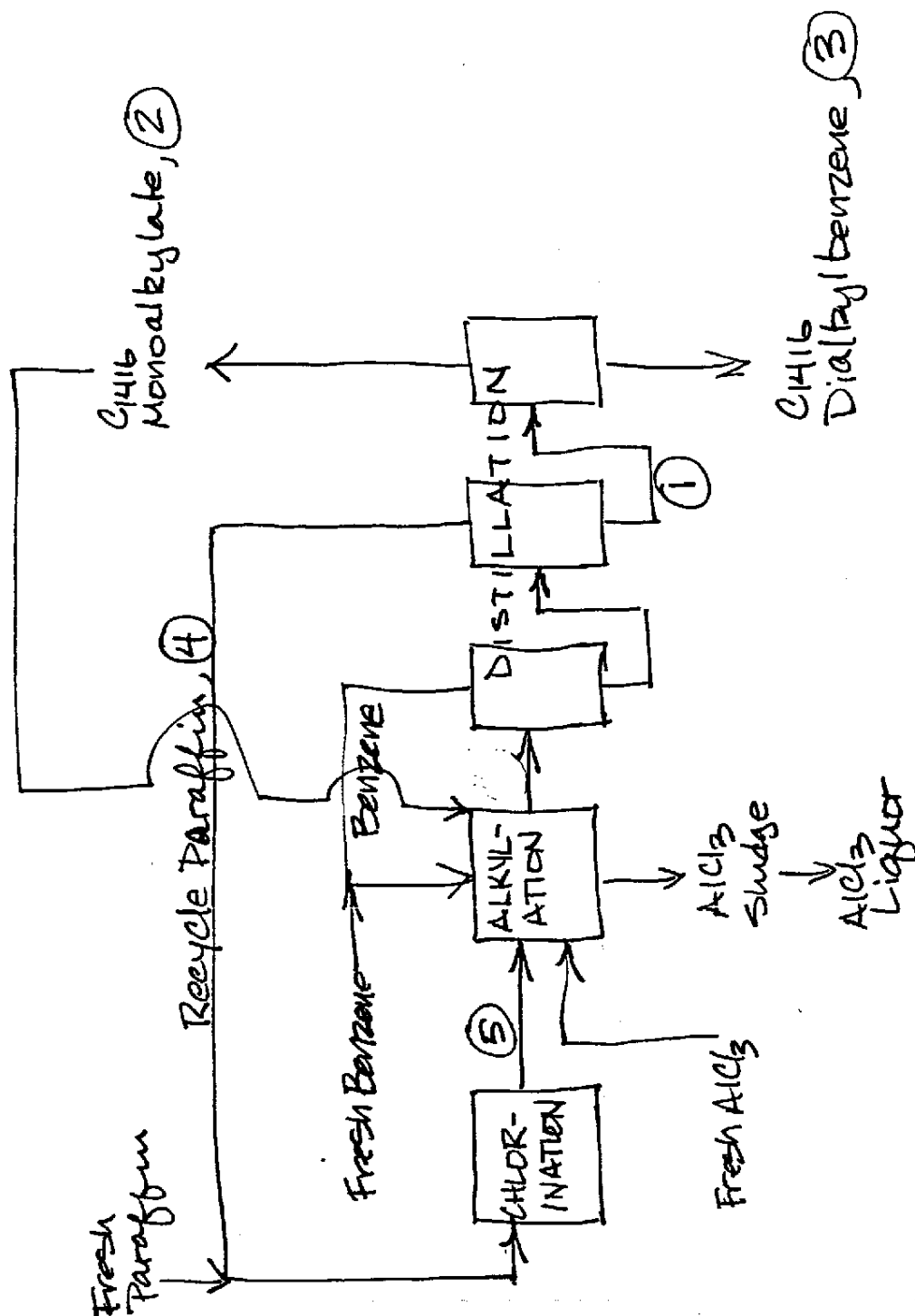
VVV 000009185

To _____

From _____

Calculation Sheet

Rough Process Flow Diagram -- C₁₄H₁₆ DAB



VVV 000009186

Made By _____

Date _____

Page _____ of _____

V3-20G-S

Job No. _____

Title _____