

SINCLAIR REFINING COMPANY

Translation Book #155

Reel 45

Bag 3446-2

Frame 743-4

1765

June 10, 1948

January 12, 1939

Wax from Medium Pressure CO Reduction

S-97

In accordance with your request we are sending you paraffin samples from the medium pressure synthesis produced in a recycle reactor and in a normal reactor (6 atm. gauge pressure), adding samples from reactors (4) and (8).

The reactor data and characteristic values of the samples are:

(1) Reactor 2: 216°, recirculation 1:4. Water gas, 7 atm. gauge pressure. Sample accumulated from December 7-15, 1938. (1602nd to 1774th hours in operation) The ratio of products was:

AK Benzine	68.6% by weight
Oil Condensate	28.8% "
Paraffin	2.6% "

Oil condensate and paraffin are to be mixed in a suitable manner.

(2) Reactor 3: Sample of Nov. 10-11, 1939. 189-191.5°. Synthesis gas, 6 atm. gauge pressure, 1580th hour in operation. The ratio of products was:

AK Benzine	18% by weight
Oil condensate	43.1% "
Paraffin	38.9% "

Since the condensate oil contains slight quantities of paraffin, it must be taken into consideration in the mixture.

(3) Reactor 4: Sample of January 6-7, 1939. 192.7°. 924th hour of operation. 5.0 atm. gauge pressure. The ratio of production was:

AK Benzine	14.4% by weight
Oil condensate	32.7% "
Paraffin	52.9% "

There is no need of mixing, since the paraffin comprises the entire portion boiling above 320°.

(4) Reactor 8: Sample drawn January 2-3, 1939. 199.5°. 5.0 atm. gauge pressure, 2144th hour of operation. Mode of operating: from bottom to top. The ratio of products was:

AK Benzine	33.7% by weight
Oil condensate	34.6% "
Paraffin	31.7% "

Mixing is unnecessary, since the paraffin contains the entire portion boiling above 320°C.

BAK

MB:op

M. Beth
5-25-48