FOR COMPANY USE ONLY

DATE August 6, 1963

TEST CONCLUSION NO. T.A.-C- 63-163

OFFICIAL PRODUCT NAME tert-Butylbenzoylbenzoic Acid (TBBBA)

PROCESS FILE

PRODUCT CODE NO. 114950 POUNDS PRODUCT ACTUAL 30,000

AREA "Ponsol" BUILDING NAME Intermediates, Bldg. #770

TITLE Revised Process

PREPARED BY: J. R. Macconi

PURPOSE OF TEST: To reduce the cost of TBBBA by adapting the process to equipment in the "Ponsol" Area.

RESULTS OF TEST: Difficulty was experienced in the drowning tank operation. Using mono-chlorobenzene as the solvent in this process gave rise to difficulty in the separation of the product-solvent and water layers. As a result of this difficulty, some losses occurred.

RECOMMENDATIONS: A TA will be written to use o-dichlorobenzene special purified in the next campaign. This solvent with its higher density should eliminate the problems encountered when MCB was used.

DISTRIBUTION

D. R. Baer, Jackson Lab.
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H. I. Stryker, Adm. Bldg.
J. T. Hale, "Ponsol", D & C

APPROVED BY:

AUTHORIZED BY: [signature] 8/7/63
SUPT. PRODUCTION AREA DATE

[signature] 8-9-63
SUPT., PROCESS DEPARTMENT DATE

[signature] 8/6/63
DATE

RLW aag

MU-1752-R-5

FOR COMPANY USE ONLY

DATE March 22, 1963

TEST AUTHORIZATION NO. T.A.-C- 63-163

OFFICIAL PRODUCT NAME tert-Butylbenzoylbenzoic Acid (TBBBA)

PRODUCT CODE NO. 114 950 POUNDS PRODUCT PROPOSED 25,000

AREA Chambers Works - "Ponsol" BUILDING NAME Intermediates Bldg. #770

TITLE Revised Process

PREPARED BY: J. R. Macconi RESPONSIBLE FOR TEST AND TEST CONCLUSION: J. R. Macconi

PURPOSE OF TEST: To reduce the cost of TBBBA by adapting the process to new "Ponsol" equipment and incorporate new technology in operation of Friedel-Craft reactions.

STANDARD INVOLVED: CWP 137-114950 dated 5-31-63 (approval pending); "Ponsol" Oper. Inst., dated 10-26-56; "Basic" Oper. Instr., dated 11-30-61.

DURATION OF TEST: One campaign - three weeks after start of test.

TEST DETAILS: (INCLUDE SAFETY) Three primary changes in procedure will be made:

1. Soda ash will be substituted for soda caustic
2. Excess solvent will be steam distilled from an alkaline solution of TBBBA as opposed to the alkaline extraction technique used in the past.
3. Charge size will be altered to more efficiently utilize the new 2000 gal. enamel kettle in "Ponsol" Intermediates Section.

Building safety rules applicable to Friedel-Craft reactions will be followed.

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D. B. Kirk, Ind. Eng. Div.
J. T. Hale, "Ponsol", D & C (5)
H. I. Stryker, Adm. Bldg.

APPROVED BY: W. J. Clem 3/26/63 DATE

AUTHORIZED BY: [signature] DATE
SUPERINTENDENT, PROCESS DEPARTMENT

AJH [signature] 3/26/63 DATE
SUPERINTENDENT, PRODUCTION AREA

RLW aag [signature] 3/22/63 DATE

MU-1752-B-R-3

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