

FOR COMPANY USE ONLY

DATE June 19, 1972TEST AUTHORIZATION NO. TA-C- 72-455

PROCESS FILE

OFFICIAL PRODUCT NAME "Latyl" Brilliant Blue BG Disperse Crude DriedPRODUCT CODE NO. 428 480 POUNDS PRODUCT PROPOSED 27,000AREA "Ponsol" BUILDING NAME Bldg. 743 "Ponsol" Dryer #2TITLE Compare spray dryer nozzles.PREPARED BY: L. C. Hale RESPONSIBLE FOR TEST
AND TEST CONCLUSION: L. C. Hale
A. C. Stein

PURPOSE OF TEST: To compare the atomization and drying of "Latyl" Brilliant Blue BG wet cake using the Proctor & Schwartz paste nozzle and a Lurgi double fluid nozzle.

DURATION OF TEST: Two charges.

STANDARD INVOLVED: None

ANALYTICAL CONTROL: ☒ No change ☐ Change described under Test Details

TECHNICAL BASIS FOR CHANGE: OCNB 310-120

TEST DETAILS:
(Include Safety and Waste Disposal) See details.

Safety: No unusual safety hazards are imposed as a result of this T.A.

Waste Disposal:Dust Emission - A negligible amount of dry product is expected to be released to the atmosphere.Liquid Wastes - The dust scrubber liquor will contain approximately 0.1 lb./cwt. of dried material. This will be washed to the ditch along with equipment wash water.

DISTRIBUTION:

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APPROVED BY:

CHIEF SUPVR., OPERATIONS

DATE

CH. SUPVR., TECH. OR PLT. ASSIST.

DATE

SUPERINTENDENT, ANALYTICAL (When Required)

DATE

SUPERINTENDENT, DYE QUALITY CONTROL (When Req'd)

DATE

AUTHORIZED BY:

SUPERINTENDENT, MANUFACTURING (Or Delegates)

DATE

SUPERINTENDENT, TECHNICAL (If Any)

DATE

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MU-1752-B-R6

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Description:

Initial screening tests have shown the Lurgi double fluid nozzle to be less severe than the Proctor & Schwartz nozzle in atomizing disperse dyes. A comparison of nozzle characteristics (throughput rates and atomizing steam pressures and rates) should be performed and their effect on quality (cloth test and Clarksville test) should be recorded. If the Lurgi nozzle is less severe on dispersions than the Proctor & Schwartz nozzle, it may be possible to dry some products in the high capacity "Ponsol" No. 2 dryer that have previously failed to pass redispersion tests.

In addition, these data will be used for experience for the Puerto Rican system.

This product was chosen because it has never passed Clarksville tests and attempts have never been made to achieve Clarksville quality.

Test Procedure:

Charge 1

1. Install the Lurgi double fluid nozzle.
2. Start the atomizing steam pressure at 100 psig. Increase the slurry flow gradually until the maximum throughput is achieved.
3. Sample for % moisture, Clarksville and cloth test.
4. Lower steam pressure to 80 psig. and determine if atomization is affected. If so, reduce slurry flow until maximum flow is reached.
5. Repeat Step 3.
6. Repeat Steps 4 and 5 at 20 psig. steam pressure intervals.
7. Return the slurry flow and steam pressure to the condition which gave the best quality and highest throughput rate. Continue drying at this condition for the remainder of the charge.

Charge 2

8. Install the 0.75" Proctor & Schwartz paste nozzle without the disperser.
9. Repeat Steps 2 and 7 above, starting at 140 psig. steam pressure and reducing in 20 psig. intervals.
10. Compare the results with the Lurgi two fluid nozzle.