

E. I. DU PONT DE NEMOURS & COMPANY
KREBS PIGMENTS DEPARTMENT
256 VANDERPOOL STREET
NEWARK, NEW JERSEY

NEWARK PLANT
PIGMENT COLOR RESEARCH REPORT

RT-573-D, SEMI-WORKS AND PLANT DEVELOPMENT

Period Covered: December 1947 - May 1948

FILE:

DATE: 10/18/48

KN-48-21

20132

RT-573-D

SEMI-WORKS AND PLANT DEVELOPMENT

INTRODUCTION

The Valepar Corporation desired a dark type RT-530-D for the Hudson Motor Car Maroon. A laboratory study was made which resulted in the ART-573-D process. Semi-Works and plant development studies were undertaken and the results are listed below.

SUMMARY AND CONCLUSIONS

1. Two identical batches were made in the semi-works on the ART-573-D formula and were equal tinctorially to the laboratory material.

2. From the grinding study made in the semi-works on lot 9439, it was decided that high speed pulverization was necessary to obtain suitable pigment fineness.

3. Eight batches were made in the plant and all were satisfactory.

4. Production assumed supervision of the manufacture of RT-573-D on April 21, 1948 and the Sales Department approved the standard (lot 53246, SD-48590) on May 5, 1948.

5. The property data of lot 53246, SD-48590 is as follows:

- | | |
|---------------------|------------------------------------|
| a. Oil Absorption | 45.8# of vehicle/100# Pig. |
| b. Dry Fineness | 19.25% retained on 325 mesh screen |
| c. Specific gravity | 1.464 |
| d. Moisture content | 0.9% |

GENERAL DISCUSSION

Complete results will be found in the DSN-48-20 covering both the semi-works and plant developments. Following is a table listing the readings of each lot, tested in our own lacquer (KV-36).

<u>Sample</u>	<u>Standard</u>	<u>Magstone</u>	<u>90/10 Extension</u>
9439	1162-39	equal	equal
9440	1162-39	equal	equal
53246	1162-39	vs dark	equal
53272	1162-39	equal	equal
54274	1162-39	dark	equal
54307	1162-39	s dark	equal
53272	53246	vvs light	equal
54274	53246	s dark	equal
54307	53246	vs dark	equal
55926	53246	vvs dark	vvs wk - vs bl
55991	53246	vs dark	vvs wk - vs bl
56026	53246	s light	vvs str
56063	53246	s int.	tr bl

Pigment Fineness was determined on four portions of lot 9439 in the semi-works and the results follow.

- | | |
|------------------------------------|----------------|
| 1. Lot 9441 | 20.0% Retained |
| 1 Regular pass + 1 High speed pass | |
| 2. Lot 9442 | 42.2% Retained |
| 1 Regular pass | |
| 3. Lot 9443 | 36.4% Retained |
| 2 Regular passes | |
| 4. Lot 9444 | 24.2% Retained |
| 1 High Speed pass | |

REFERENCES

KN-48-20 Laboratory Development
DSN-48-20 Semi-Works & Plant Development
PLM #148 of 12/31/48 and 1/26/48
N.B. 1162:

- 30 - Eval. lot 9439
- 31 - Eval. lots 9440, 9441, 9442, 9443 and 9444
- 39 - Eval. Plant lots 53246 & 53272
- 45 - Eval. Plant lots " " , 54274 & 54307
- 54 - Eval. Plant lots 55926, 55991, 56026, 56063