

F&F TECHNICAL PROGRAM REVIEW

PAW
2-17-82

TECHNICAL PROGRAMS

- IMPROVED U. V. ABSORBERS
- NEW ORGANIC YELLOW
- NEW PHTHALOCYANINE BLUE PIGMENTS
- IMPROVED RHEOLOGY QUINACRIDONES

KEYS TO SUCCESS

DIRECT TECHNICAL INTERACTION

- C&P: - TECHNICAL SERVICE
 - R&D
- F&F: - TROY
 - MARSHALL LAB.
 - EXP. STATION

IMPROVED RHEOLOGY QUINACRIDONES

OBJECTIVE:

IMPROVE RHEOLOGICAL PROPERTIES OF
QUINACRIDONES TO MAINTAIN THEIR USE AS
VIABLE STYLING PIGMENTS IN HIGH SOLIDS
PAINT SYSTEMS.

PROGRAM STATUS:

- JOINT DEVELOPMENT PROGRAM ESTABLISHED
- CRITICAL FACTORS AFFECTING QA RHEOLOGY
DEFINED
- TWO IMPROVED PRODUCTS DEVELOPED

IMPROVED RHEOLOGY QUINACRIDONES

● IMPROVED W-805 (XRT-343-D)

- NEW FINISHING PROCESS
- DRAMATIC VISCOSITY, DOI IMPROVEMENTS

	MILL BASE		SPECTRA RED	
	<u>VISCOSITY</u>	<u>% RECOVERY</u>	<u>GLOSS</u>	<u>DOI</u>
W-805	2000	44	84	70
XRT-343-D	190	83	84	85

- DEVELOPED THROUGH PILOT PLANT
- PROCESS OPTIMIZATION UNDERWAY
- ADDITIONAL SAMPLES BY 2Q'82
- PLANT TEST - 3Q'82

IMPROVED RHEOLOGY QUINACRIDONES

● IMPROVED W-811 (XRT-859-D)

- SURFACE TREATED WITH POLAR QA
- IMPROVED VISCOSITY, GLOSS, DOI
- ALLOWS COLOR FORMULATION AT HIGHER SOLIDS LOADINGS

	<u>MILL BASE</u>		<u>RED BLEND (P/B=.3)</u>	
	<u>VISCOSITY</u>	<u>% RECOVERY</u>	<u>GLOSS</u>	<u>DOI</u>
W-811	220	88	69	55
XRT-859-D	50	92	82	75

- DEVELOPED THROUGH PLANT TEST STAGE
- SAMPLES TO F&F BY 4/82
- COMMERCIAL BY 3Q'82

NEW PHTHALOCYANINE BLUE PIGMENTS

OBJECTIVE:

DEVELOP IMPROVED CPC BLUE PRODUCTS FOR USE IN
LDL AND HIGH SOLIDS ENAMELS.

PROGRAM STATUS:

- TWO PRODUCTS DEVELOPED
- CPC BLUE FOR HIGH SOLIDS ENAMELS
 - OPTIMIZED FOR RHEOLOGY
 - SUBSTANTIAL IMPROVEMENT IN VISCOSITY
OVER W-565 (B-4806)
 - DEVELOPED THROUGH PILOT PLANT
- IMPROVED W-507 (XBT-579-D) FOR LDL
 - NO RESIN - COMPATIBLE WITH LDL,
HIGH SOLIDS ENAMEL
 - OPTIMIZED FOR TRANSPARENCY, COLOR -
COMPETITIVE TO W-565
 - DEVELOPED THROUGH PLANT TEST
 - SAMPLES AVAILABLE BY 4/82
 - COMMERCIAL BY END 3Q

NEW ORGANIC YELLOW

OBJECTIVE:

DEVELOP AN ORGANIC YELLOW PIGMENT SUITABLE
FOR AUTOMOTIVE FINISHES.

PROGRAM STATUS:

- DEVELOPED POTENTIALLY PROPRIETARY AZO YELLOW
BASED ON ANTHRANILAMIDE
- PRELIMINARY TESTS INDICATE
 - RED SHADE YELLOW
 - EXCELLENT ACCELERATED DURABILITY
 - EXCELLENT VALUE-IN-USE VS. MAJOR
COMPETITIVES
- DEVELOPMENT PROGRAM INITIATED
 - DURABILITY CONFIRMATION
 - PROCESS DEVELOPMENT
 - PILOT PLANT SCALE-UP
 - SAMPLING TO F&F
 - DECISION TO CONTINUE DEVELOPMENT

U. V. ABSORBERS

OBJECTIVE:

DEVELOP U. V. ABSORBERS PROVIDING BETTER DURABILITY AND VALUE-IN-USE THAN COMPETITIVE MATERIALS CURRENTLY USED IN AUTOMOTIVE CLEAR COATS.

PROGRAM STATUS:

- JOINT PROGRAM WITH EXPERIMENTAL STATION GROUP
- DEVELOPED TWO APPROACHES -
 - INSOLUBLE STABILIZERS
 - HIGH COST
 - INADEQUATE DURABILITY
 - POLYMERIZABLE STABILIZERS
 - HIGH COST
 - EQUAL TO BEST TINUVIN AT EQUAL LOADING
 - VALUE-IN-USE DETERMINATION UNDERWAY