

MONSANTO CHEMICAL COMPANY
Plastics Division
Limited Procedure for Process Modification

Requested by ... Archie P. Torrenzano ...

Number ... E 88-42 ...

Technical Supervision
and Reporting By ... Archie P. Torrenzano

Plant ... Springfield ...

	Date	Approval
Product Group .. Vinyl Resin	P.T.S. Supv. Eng. 8/31	F. Duston
Plant Dept. No .. 88	Research Grp. Lead. 8/28	R. Pollard
Limited to: Amt. of Material 20 batches	Oper. Supt. 9/2	R. Perry
or Expiration Date	*Gen. Mfg. Supt.	
	*P.T.S. Manager	
Modification of SDP Addition of Lauric Acid and Maleic Anhydride	Standards Dept. 9/3	A. Ericksberg
Reason for Requested Variation		

*Approval required when segregation of expense is specified.

To determine the effect of lauric acid and maleic anhydride on suspension, homopolymer resin quality (particularly particle size and heat stability). This information should permit us to redefine "Raw material Specifications" for Lauroyl Peroxide, Hethyl Glucoside Dilaurate, and PDR-1.

Details of Modified Procedure

The Opalon 300 FM - X-58 process will be used except for the addition of Lauric Acid or Maleic Anhydride to the batch formulation. In the first series of runs, Lauric Acid will be used in increasing amounts (100 grams, 200 grams, 300 grams, etc.) up to 1000 grams, which represents 10 percent of the weight of L₂O₂ or MGD normally used in a batch formulation.

In the second series, Maleic Anhydride will be used in increasing amounts up to 750 grams, which represents 10 percent of the weight of PDR-1 used in the batch formulation.

ISSUED SEP 8 1959
STANDARDS DEPARTMENT

Reference to Previous Work

1. A.P.T. To F.A.D. Progress Report on PDR-1 Study, July 21, 1959
2. L.D.H. To F.A.D. Progress Reports on L₂O₂ Study, C Dec. 1958
3. Recent MGD study using material with acid number of 10-15 (approx. 10% Lauric Acid).

Safety Hazards and Precautions (Including Toxic, and Steam Pollution)

Maleic Anhydride will be handled with protective equipment by a supervisor only.

Product Testing Required and by Whom

Slurry samples will be tested by control lab for (1) particle size, (2) bulk density (3) dry time (4) color and heat stability (5) V.R., (6) Babender tests (7) extrusion.

Identification and Disposition of Material

Segregation of Product	All material will be segregated from normal production
Labeling of Product	Opalon 368 X
Approval for Shipment	To be used captively with approval of Research and Tech Service

Costs

A. Estimated effect on manufacturing costs, if successful

None

B. Estimated extra manufacturing cost of this experiment

None

C. Segregation of Costs (by Operating Superintendent)

☒
☐

No segregation of Costs required
Special Accounting number will be required

D. If costs are segregated, accounting number assigned (by P.T.S. Manager)

Informational Copies to: (To be filled out by Standards Department)

Plant Laboratory Supervisor
Planning and Control Supt.
Marketing Technical Service Mgr.
General Mfg. Supt.
P. T. S. Manager
Accounting Dept.
Product Administrator
Research Section Leader
Overseas Mfg. Dept.
Other Domestic Plants

Foreign Plants

Other

L. Louraine
J. Hinchey
T. Haselton
W. Willis
B. Dunlap
J. Crabtree - P. Pastuszek
A. Erdman
O. Cohen
H. Armstrong

C. H. Mills

MONSANTO CHEMICAL COMPANY
Plastics Division
Limited Procedure for Process Modification

Requested by ARNIE P. TORREZANO.....Number ...P. 57.....Technical Supervision
and Reporting By ARNIE P. TORREZANOPlant 1/1.....

	Date	Approval
Product Group ... <u>Vinyl Resin</u>	P.T.S. Supv. Eng. <u>3/1/59</u>	<u>F. A. Austin</u>
Plant Dept. No ... <u>88</u>	Research Grp. Lead. <u>8/25/59</u>	<u>R. E. Rollard</u>
Limited to: Amt. of Material <u>20. Batches</u>	Oper. Supt. <u>9/2/59</u>	<u>R. K. Perry</u>
or Expiration Date	*Gen. Mfg. Supt.	
Modification of SDP <u>Addition of LAURIC</u>	*P.T.S. Manager	
<u>ACID and Maleic Anhydride</u>	Standards Dept. <u>9/3/</u>	<u>C. E. Enck</u>
<u>Reason for Requested Variation</u>	<u>9/3</u>	<u>J. E. Enck</u>

*Approval required when segregation of expense is specified.

To determine the effect of LAURIC ACID and maleic anhydride on suspension, homopolymer resin quality (particularly particle size and heat stability). This information should permit us to redefine "Raw Material specifications" for LAURYL peroxide, methyl glucoside dilaurate, and PDR-1.

Details of Modified Procedure

The Opalan 300 FM - X-58 process will be used except for the addition of LAURIC ACID or maleic anhydride to the batch formulation. In the first series of runs, LAURIC ACID will be used in increasing amounts (100 grams, 200 grams, 300 grams, etc) up to 1000 grams, which represents 10 percent of the weight of L_2O_2 or MGD normally used, in a batch formulation.

In the second series, maleic anhydride will be used in increasing amounts up to 750 grams, which represents 10 percent of the weight of PDR-1 used in the batch formulation.

ISSUED SEP 21 1959
STANDARDS DEPARTMENT

Reference to Previous Work

1. APT to F.A.D., Progress Report on PDR-1 Study, July 21, 1959.
2. L.D.H. to F.A.D., Progress Reports on L_2O_2 Study, E. Dec. 1958
3. Report MGD study using material with acid number of 10-15 (approx 10% as lauric acid).

Safety Hazards and Precautions (Including Toxicity, Air, and Steam Pollution)

Maleic Anhydride will be handled with protective Equipment, by a Supervisor only.

Product Testing Required and by Whom

Slurry samples will be tested by control LAB for (1) particle size, (2) bulk density (3) dry time (4) color and heat stability (5) V.R., (6) Beabender tests, (7) extension.

Identification and Disposition of Material

Segregation of Product	ALL MAT'L will be segregated from normal production.
Labeling of Product	Opalox 368 X.
Approval for Shipment	To be used captively with approval of Research and Tech Service.

Costs

A. Estimated effect on manufacturing costs, if successful

none

B. Estimated extra manufacturing cost of this experiment

none

C. Segregation of Costs (by Operating Superintendent)

☒ No segregation of Costs required
☐ Special Accounting number will be required

D. If costs are segregated, accounting number assigned (by P.T.S. Manager)

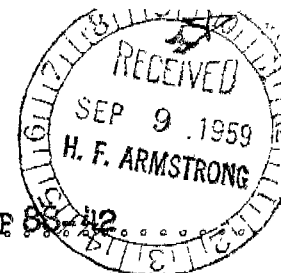
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Foreign Plants

Other

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Plastics Division
Limited Procedure for Process Modification



Requested by ... Archie P. Torrenzano

Number ... P 88-42

Technical Supervision
and Reporting By ... Archie P. Torrenzano

Plant ... Springfield

		Date	Approval
Product Group ... Vinyl Resin	P.T.S. Supv. Eng.	8/31	F. Duston
Plant Dept. No ... 88	Research Grp. Lead.	8/28	R. Pollard
Limited to: Amt. of Material 20 batches	Oper. Supt.	9/2	R. Perry
or Expiration Date	*Gen. Mfg. Supt.		
Modification of SDP Addition of Lauric Acid and Maleic Anhydride	*P.T.S. Manager		
Reason for Requested Variation	Standards Dept.	9/3	A. Ericksberg

*Approval required when segregation
of expense is specified.

To determine the effect of lauric acid and maleic anhydride on suspension, homopolymer resin quality (particularly particle size and heat stability). This information should permit us to redefine "Raw material Specifications" for Lauroyl Peroxide, Hethyl Glucoside Dilaurate, and PDR-1.

Details of Modified Procedure

The Opalon 300 FM - X-58 process will be used except for the addition of Lauric Acid or Maleic Anhydride to the batch formulation. In the first series of runs, Lauric Acid will be used in increasing amounts (100 grams, 200 grams, 300 grams, etc.) up to 1000 grams, which represents 10 percent of the weight of L₂O₂ or MQD normally used in a batch formulation.

In the second series, Maleic Anhydride will be used in increasing amounts up to 750 grams, which represents 10 percent of the weight of PDR-1 used in the batch formulation.

ISSUED SEP 8 1959
STANDARD DEPARTMENT

Reference to Previous Work

1. A.P.T. To F.A.D. Progress Report on PDR-1 Study, July 21, 1959
2. L.D.H. To F.A.D. Progress Reports on L₂O₂ Study, C Dec. 1958
3. Recent MQD study using material with acid number of 10-15 (approx. 10% Lauric Acid).

Safety Hazards and Precautions (Including Toxicity, Air, and Steam Pollution)

Maleic Anhydride will be handled with protective equipment by a supervisor only.

Product Testing Required and by Whom

Slurry samples will be tested by control lab for (1) particle size, (2) bulk density (3) dry time (4) color and heat stability (5) V.R., (6) Brabender tests (7) extrusion.

Identification and Disposition of Material

Segregation of Product	All material will be segregated from normal production
Labeling of Product	Opalon 368 X
Approval for Shipment	To be used captively with approval of Research and Tech Service

Costs

A. Estimated effect on manufacturing costs, if successful

None

B. Estimated extra manufacturing cost of this experiment

None

C. Segregation of Costs (by Operating Superintendent)

- ☒ No segregation of Costs required
☐ Special Accounting number will be required

D. If costs are segregated, accounting number assigned (by P.T.S. Manager)

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