

AN 8063
[initials]

December 12, 1990

Mark Hross
Gary Jones
Mike Marshall

Attached are copies of handouts from the 12/10/90 TCC meeting.

Please have your comments to me on the Generic Product
Stewardship System Requirements section by December 14.



R. K. Hinderer

. 1212-1/jp

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GENERIC PRODUCT STEWARDSHIP SYSTEM REQUIREMENTS

RAW MATERIALS

A. RESEARCH AND DEVELOPMENT

1. ACQUISITION

- R & D CHEMIST REQUESTS SAMPLES.
- SALESMEN VOLUNTARILY SUBMIT SAMPLES.

2. REQUIREMENTS

- MATERIAL SAFETY DATA SHEET (MSDS) MUST BE ACQUIRED FOR ALL MATERIALS, EITHER BY:
 - CHEMISTS
 - R & D HAZARD COMMUNICATION COORDINATOR
 - MAINTAINED BY BOTH
- TSCA INVENTORY CONFIRMATION NOT REQUIRED, BUT IF RECEIVED WITH SAMPLE, MUST DESIGNATE WHETHER KNOWN OR UNKNOWN STATUS.

3. RULES

- NO MATERIAL MAY BE USED IN R & D WITHOUT AN MSDS.
- CENTRAL R & D CHEMICAL TRACKING SYSTEM MUST INCLUDE:
 - CHEMIST'S NAME
 - DATE RECEIVED
 - MSDS YES/NO
 - TSCA
 - STATUS KNOWN YES/NO ON INVENTORY
 - UNKNOWN
 - TRADE NAME
 - CHEMICAL NAME
 - SUPPLIER
 - CAS NUMBER OF SUB-INGREDIENTS

intended use of the material should be noted when available and applicable product regulations¹ (FDA, USDA, CPSC, ~~FFRA~~ FIFRA) should be determined

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B. PILOT PLANT AND FULL-SCALE PRODUCTION REQUIREMENTS

1. RULES

- MUST CONFIRM HAZARD COMMUNICATION COMPLIANCE.
 - MSDS MUST BE TRANSFERRED TO PILOT PLANT.
 - EVALUATE FOR INTERNAL LABEL SYSTEM, I.E. HMIS/NFPA/OTHER.
 - IDENTIFY SUB-INGREDIENTS FOR MSDS WRITING SYSTEM AND LOAD ONTO DATABASE.
 - HAZARDOUS WASTE STATUS MUST BE DETERMINED.
 - TSCA INVENTORY CONFIRMATION IS REQUIRED. YES/NO
 - IF NO, MUST CONFIRM R & D RECORDKEEPING IS IN PLACE.
 - MANDATORY ^{TSCA} CERTIFICATION LETTERS ARE REQUIRED FROM EACH QUALIFIED SUPPLIER FOR EACH RAW MATERIAL.
2. THE DIVISIONAL HEALTH, SAFETY AND ENVIRONMENTAL DEPARTMENT MUST CERTIFY TO PURCHASING AUTHORITY TO PURCHASE BY ADDITION TO QUALIFIED SUPPLIER LIST.
3. PURCHASING MAY NOT PURCHASE ANY RAW MATERIALS FOR PILOT PLANT OR FULL-SCALE PRODUCTION WITHOUT AUTHORIZATION FROM HS&E DEPARTMENT.

C. SHIPMENTS - RESEARCH AND DEVELOPMENT, PILOT PLANT OR FULL-SCALE MANUFACTURING

- MUST DETERMINE TSCA INVENTORY STATUS. YES/NO
 - IF NO, MUST SEND R & D TSCA NOTICE TO RECEIVER.
 - MUST ALSO CONFIRM R & D RECORDS.
- SEND MSDS AND CONFIRM LABEL.
- CONFIRM DOT COMPLIANCE.
- *confirm compliance with other product regulations*

Confirmation of compliance with applicable product regulation (FDA, USDA, FIFRA, CPSC, etc) must be conducted (for FDA, USDA, etc see attached GMPs) 2

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FORMULATIONS (INTERMEDIATES AND FINISHED GOODS)

A. RESEARCH AND DEVELOPMENT

1. MINIMUM RECORDKEEPING REQUIREMENT, EITHER CHEMIST OR CENTRAL.
 - IF NEW CHEMICAL IS CREATED (I.E. SYNTHESIZED), THE FOLLOWING RECORDS MUST BE MAINTAINED AND CONFIRMED:
 - (A) COPIES OF OR CITATIONS TO INFORMATION REVIEWED TO DETERMINE THE RISK OF NEW SUBSTANCE.
 - (B) COPIES OF NOTICES OF RISK (I.E. LABELS, MSDS, OTHER).
 - (C) DOCUMENTATION OF PRUDENT LABORATORY PRACTICES.
 - (D) NAMES AND ADDRESSES OF PERSONS TO WHOM SUBSTANCE IS DISTRIBUTED.
 - IDENTITY OF SUBSTANCE TO EXTENT KNOWN.
 - AMOUNT DISTRIBUTED.
 - COPIES OF NOTIFICATIONS (I.E. LABELS, MSDS, OTHER).
 - IF NEW CHEMICAL IS MANUFACTURED AT GREATER THAN 100 KG PER YEAR, MUST MAINTAIN:
 - IDENTITY OF SUBSTANCE TO EXTENT KNOWN.
 - PRODUCTION VOLUME OF SUBSTANCE.
 - DISPOSITION OF SUBSTANCE.
2. SHIPPING REQUIREMENTS
 - DETERMINE TSCA INVENTORY STATUS OF ALL INGREDIENTS. YES/NO
 - IF NO, MUST SEND R & D TSCA NOTICE AND CONFIRM TSCA R & D RECORD MAINTENANCE.
 - SEND MSDS AND CREATE LABEL.
 - CONFIRM DOT COMPLIANCE.

→ Repeat from page 2

"Confirmation ----

B. PILOT PLANT AND FULL-SCALE PRODUCTION

1. NEW FORMULATIONS

- CREATED BY R & D, MANUFACTURED BY PILOT PLANT OR FULL-SCALE PRODUCTION.

RULES

- ALL FORMULATIONS MUST BE REVIEWED BY DIVISIONAL HEALTH, SAFETY AND ENVIRONMENTAL DEPARTMENT, CONFIRMING THE FOLLOWING:

- TSCA COMPLIANCE
- HAZARD COMMUNICATION COMPLIANCE
- ENVIRONMENTAL COMPLIANCE
- FDA COMPLIANCE

, USDA, or other ^{regulatory} products

- IT IS SUGGESTED THAT A PIP/FORMULATION REVIEW SYSTEM BE IMPLEMENTED.

2. ALL FORMULATIONS MUST BE APPROVED AND CERTIFIED BY HEALTH, SAFETY AND ENVIRONMENTAL FOR THE FOLLOWING:

- ALL INGREDIENTS ARE ON THE TSCA INVENTORY.
- ALL INTERNAL REACTIONS ARE ON THE TSCA INVENTORY.
- THE CHEMICALS ON REPORTING RULES (CORR) MUST BE REVIEWED AND COMPLIANCE CONFIRMED.
- MSDS MUST BE CREATED.
- LABEL MUST BE CREATED.
- ENVIRONMENTAL STATUS MUST BE DETERMINED (I.E. HAZARDOUS WASTE STATUS, PROPOSITION 65 STATUS, CERCLA STATUS, ETC.). ANY TOXICITY TESTING MUST BE CONFIRMED.

- TME'S, PMN'S, ETC.

- *GMPs must be followed for FDA, ^{USDA, NSF} regulated products*

3. MANUFACTURING FACILITIES ARE NOT AUTHORIZED TO PRODUCE ANY FORMULATIONS WITHOUT A DIVISIONAL HS&E DEPARTMENT CERTIFICATION ON OR WITH THE FORMULATION (I.E. RECIPE AND INVENTORY CONTROL CARD).

4. PROCEDURE

- A. R & D SUBMITS FORMULATION TO DIVISIONAL HEALTH, SAFETY AND ENVIRONMENTAL DEPARTMENT FOR REVIEW.
- B. DIVISIONAL HEALTH, SAFETY AND ENVIRONMENTAL DEPARTMENT PERFORMS REVIEW.
- C. DIVISIONAL HEALTH, SAFETY AND ENVIRONMENTAL DEPARTMENT APPROVES FORMULATION AND CERTIFIES TO INVENTORY CONTROL ON THE FORMULATION RECIPE.
- D. MANUFACTURING IS THEN AUTHORIZED BY INVENTORY CONTROL TO PRODUCE.

5. MODIFIED FORMULATIONS

- R & D GENERATED MODIFICATIONS
 - MANUFACTURING GENERATED MODIFICATIONS
- RULES

- A. ALL MANUFACTURING MODIFIED FORMULATIONS MUST BE REVIEWED AND APPROVED BY A RESPONSIBLE R & D CHEMIST.
- B. ALL R & D MODIFIED FORMULATIONS MUST BE APPROVED BY PLANT PROCESS ENGINEERING AT MANUFACTURING.
- C. ALL MODIFIED FORMULATIONS MUST BE ROUTED THROUGH THE NEW FORMULATION REVIEW PROCEDURES OUTLINED ABOVE.

6. SHIPPING REQUIREMENTS

- CONFIRM TSCA COMPLIANCE. YES/NO
 - IF NO, SEND R & D NOTICE AND CONFIRM R & D TSCA RECORDS.
- CONFIRM MSDS AND LABEL.
- CONFIRM DOT PROCEDURES.
- CONFIRM FDA ^{AND} USDA ^{PROCEDURES} ^{with} PROCEDURES.

repeat from page 2 "Confirmation - - -"

~~CONFIDENTIAL~~
TSCA, FDA, USDA, ~~EF~~ FIFRA, etc

C. PURCHASE FOR RESALE

1. RULES

- A. MUST OBTAIN MSDS, LABEL AND TSCA CERTIFICATION FROM SUPPLIER AND SUBMIT TO DIVISIONAL HEALTH, SAFETY AND ENVIRONMENTAL DEPARTMENT.
- B. HEALTH, SAFETY AND ENVIRONMENTAL DEPARTMENT MUST CREATE MSDS AND LABEL, PERFORM ENVIRONMENTAL FDA AND TSCA REVIEW, AND CERTIFY AUTHORIZATION TO PURCHASING. *(also see GMPs for FDA)*
- C. PURCHASING MAY NOT PURCHASE ANY PURCHASE FOR RESALE UNTIL AUTHORIZED BY DIVISIONAL HEALTH, SAFETY AND ENVIRONMENTAL DEPARTMENT. *(USDA 1/4/84)*

D. BY-PRODUCTS OR WASTESTREAMS USED OR DISTRIBUTED FOR COMMERCIAL PURPOSES OTHER THAN DISPOSAL.

- PROCEDURES FOR MODIFIED FORMULATIONS MUST BE FOLLOWED AS IF INITIATED BY MANUFACTURING PLANT (I.E. THESE MATERIALS REQUIRE HAZARD COMMUNICATION COMPLIANCE, TSCA COMPLIANCE, ETC.).

IMPORTS

A. RULES

1. ALL PERSONS AUTHORIZED TO IMPORT MUST BE IDENTIFIED.
2. ALL OTHER PERSONS MUST BE INFORMED THAT NO IMPORTS ARE AUTHORIZED.
3. ALL IMPORTS MUST BE REVIEWED AND CONFIRMED FOR THE FOLLOWING:
 - ALL INGREDIENTS ARE ON THE TSCA INVENTORY.
 - REVIEW THE CHEMICALS ON REPORTING RULES LIST (CORR) FOR REPORTING RULES.
 - U.S. MSDS AND LABELS MUST BE CONFIRMED AND/OR PREPARED.
 - CONFIRM FDA, ^{USDA} *for other regulatory compliance*

EXPORTS

A. RULES

1. ALL PERSONS AUTHORIZED TO EXPORT MUST BE IDENTIFIED.
2. ALL OTHER PERSONS MUST BE INFORMED THEY ARE NOT AUTHORIZED TO EXPORT.
3. ALL EXPORTS MUST BE REVIEWED AND CONFIRMED FOR THE FOLLOWING:
 - ALL INGREDIENTS MUST BE IDENTIFIED.
 - REVIEW TSCA 12(b) EXPORT REPORTING LIST.
 - IF ANY OF THE INGREDIENTS ARE LISTED ON THE 12(b) EXPORT LIST, THEN NOTICE MUST BE SENT TO EPA PRIOR TO THE TIME OF EXPORT.
 - FOREIGN TSCA, HAZARD COMMUNICATION AND FDA EQUIVALENT LAWS AND REGULATIONS MUST BE CONFIRMED ON ALL EXPORTS. *process and other product*

NON-INVENTORY CHEMICALS

A. EXAMPLES - LAB SUPPLIES, JANITORIAL SUPPLIES, MAINTENANCE SUPPLIES.

1. THE USING FACILITY MUST MAINTAIN MSDS FOR ALL COMPOUNDS.
2. THE USING FACILITY MUST MAINTAIN THE INGREDIENTS FOR ALL COMPOUNDS FOR SARA TITLE III REPORTING PURPOSES.

RECOMMENDED IMPLEMENTATION TIME LINES

1991

JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.

X-----X

SELF-ASSESSMENTS
AGAINST MINIMUM
REQUIREMENTS

X-----X

CORRECTIVE ACTION
FOR IDENTIFIED
DEFICIENCIES

X-----X

CORPORATE ASSURANCE
AUDIT AGAINST MINI-
MUM SYSTEM REQUIRE-
MENTS

1992

JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.

X-----X

CORPORATE AUDIT
FOR TSCA COMPLI-
ANCE

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T S C A & H A Z A R D C O M M U N I C A T I O N
C O M P L I A N C E P R O G R A M
S U M M A R Y

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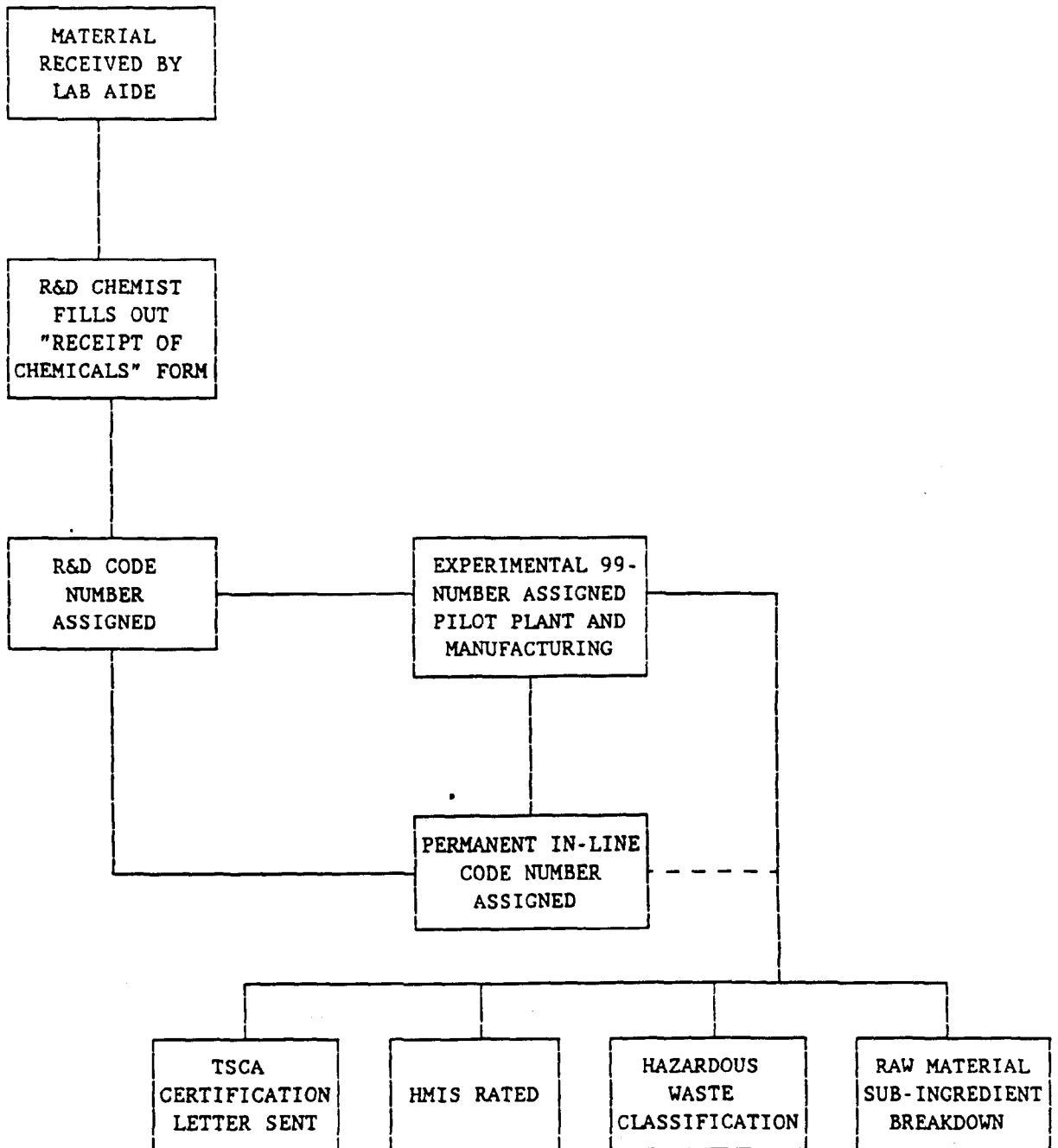
RAW MATERIAL TRACKING SYSTEM

- CHEMICALS ARE RECEIVED INTO R&D BY THE LAB AIDE, WHO IMMEDIATELY NOTIFIES THE RECEIVING CHEMIST AND REQUIRES A "RECEIPT OF CHEMICAL" FORM BE COMPLETED BEFORE RELEASING THE MATERIAL TO THE CHEMIST.
- THIS FORM IS SUBMITTED TO ENVIRONMENTAL ALONG WITH A MATERIAL SAFETY DATA SHEET (MSDS). IF AN MSDS IS NOT RECEIVED WITH THE MATERIAL, ENVIRONMENTAL WILL IMMEDIATELY REQUEST ONE FROM THE SUPPLIER.
- AN R&D CODE NUMBER IS ASSIGNED BY ENVIRONMENTAL AND ALL CHEMICAL INFORMATION ADDED INTO THE COMPUTER, IE., TRADE NAME, CHEMICAL NAME, SUPPLIER, CAS NUMBER.
- AN EXPERIMENTAL (99 SERIES) CODE NUMBER IS ASSIGNED FOR ALL RAW MATERIALS BEING USED IN EXPERIMENTAL BATCHES AT THE PILOT PLANT OR THE MANUFACTURING PLANTS.
- UPON ASSIGNMENT OF A 99 NUMBER A RAW MATERIAL SPEC SHEET IS WRITTEN BY THE CHEMIST AND SENT TO THE SUPPLIER FOR CONFIRMATION. A RAW MATERIAL EVALUATION FORM IS CIRCULATED IN ENVIRONMENTAL WHICH REQUIRES HMIS RATINGS, HAZARDOUS WASTE INFORMATION AND A BREAK DOWN OF THE SUB-INGREDIENTS IN THE RAW MATERIAL. ALL THIS INFORMATION IS ADDED TO OUR CHEM-LINK DATA BASE. A TSCA CERTIFICATION LETTER IS IMMEDIATELY SENT TO THE SUPPLIER TO ENSURE TSCA COMPLIANCE.
- WHEN A RAW MATERIAL IS GOING TO BE USED IN AN IN-LINE PRODUCT, A PERMANENT (50-58 SERIES) CODE NUMBER IS ASSIGNED. IF THE PRODUCT DID NOT PREVIOUSLY HAVE A 99 NUMBER, ALL INFORMATION NOTED ABOVE WILL BE COMPLETED.
- BATCHCARDS WILL NOT BE RELEASED FOR PRODUCTION AT THE MANUFACTURING LEVEL WITHOUT TSCA CERTIFICATION.

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RAW MATERIAL TRACKING SYSTEM



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TO: ENVIRONMENTAL AFFAIRS

REPORT OF RECEIPT OF CHEMICAL SUPPLIES

RECEIVED BY CHEMIST _____

DATE RECEIVED _____

APPROVED BY GROUP MANAGER _____

SUPPLIER NAME _____

ADDRESS _____

The chemical(s) listed below have been reviewed to ensure the following:

1. Minimum quantity necessary has been ordered.
2. MSDS and label have been reviewed.
3. Safe work practices established and appropriate personal protection is available.

Code No. Assigned	Amt Rec	Description	Chemical Name	MSDS Rec

Note: Attach MSDS, TSCA information and any other Environmental or Health information available.

000-118 Rev. 1/88

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TREMCO

3735 GREEN ROAD • BEACHWOOD, OHIO 44122 • 216/292-5000
DIRECT DIAL NUMBER

Re: Material Safety Data Sheet Request/
Toxic Substance Control Act (TSCA)
15 USC 2601 et. seq. Compliance Activities

Dear Sir or Madam:

As a supplier of raw material chemicals to Tremco, Inc., it is important that you answer all the following questions in order to insure that the raw materials which you are supplying are in compliance with specific provisions of the Toxic Substances Control Act (TSCA) 15 USC 2601. et. seq. A list of the raw material(s) that we are inquiring about is attached.

For each raw material listed on the attached, please answer the following:

1. For chemical substances:

Is the substance registered with the EPA on the list or "inventory" of existing chemical substances either by inclusion on the initial inventory or by submitting a Premanufacture Notification (PMN) after July 1, 1979, to the EPA?

2. For mixtures of chemical substances:

Are all components of the mixture on the list or "inventory" of existing chemical substances either by inclusion on the initial inventory or by submitting a Premanufacture Notification (PMN) after July 1, 1979, to the EPA?

3. To the best of your knowledge, has a "substantial risk" notification been submitted to the EPA on the raw material(s) under Section 8(e) of the act?

4. Has the EPA proposed or promulgated "significant new use" rules or regulations under Section 5(a)(1)(B) or 5(a)(2) of the act for any product on the attached list?

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TREMCO

3735 GREEN ROAD • BEACHWOOD, OHIO 44122 • 216/292-5000
DIRECT DIAL NUMBER

Page 2

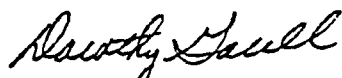
Your cooperation, in promptly answering the above questions regarding the Tremco TSCA compliance activities, will be appreciated and will enable Tremco to purchase these raw materials from your company in the future.

In addition to the above, please forward the most recent Material Safety Data Sheet (MSDS) for each product listed in order that Tremco may insure compliance with the Federal OSHA Hazard Communication Regulations at 29 CFR 1910.1200. Your cooperation in this matter will be appreciated.

Please return a copy of this letter with your response to my attention.

If you have any questions or comments concerning the above, please contact me or Mr. David Trimble, Corporate Manager, Environmental Affairs at 216/765-6734.

Very truly yours,



Dorothy Gaull
Administrative Manager

Raw Material:

Code Number:

20893016

TREMCO RAW MATERIAL SPECIFICATIONS

GENERIC TYPE/TRADE NAME _____ IN-LINE CODE NO _____
 SUPPLIER _____ R & D NO. _____
 CHEMICAL NAME/MATERIAL NAME _____ 99. NO. _____

<u>Composition</u>	<u>CAS No.</u>	<u>DATE</u>		<u>S. T. NO.</u>
_____	_____	_____	% Unsaturation _____	_____
_____	_____	_____	Oil Absorption _____	_____
_____	_____	_____	Mass Tone _____	_____
_____	_____	_____	Let Down _____	_____
_____	_____	_____	Fineness (Av. Part. Size) _____	_____
_____	_____	_____	% Retained on #10 _____	_____
_____	_____	_____	% Retained on #20 _____	_____
_____	_____	_____	% Retained on #30 _____	_____
_____	_____	_____	% Retained on #40 _____	_____
_____	_____	_____	% Retained on #50 _____	_____
_____	_____	_____	% Retained on #70 _____	_____
_____	_____	_____	% Retained on #100 _____	_____
_____	_____	_____	% Retained on #200 _____	_____
_____	_____	_____	% Retained on #325 _____	_____
_____	_____	_____	% Retained in Pan _____	_____
<u>Physical/Chemical Properties</u>			% Water Sol. Salts _____	_____
Sp. Gr. _____ @ C° _____ F° _____	S. T. NO. _____	<u>Additional Physical/Chemical Properties</u>		
Wt./Gal. _____	_____	_____		
Color _____	_____	_____		
Viscosity _____	_____	_____		
Flash Point-OC/CC _____	_____	_____		
Auto. Ign. Temp. _____	_____	_____		
Acid No. _____	_____	_____		
Saponification No. _____	_____	_____		
pH _____	_____	_____		
Melt Point _____	_____	_____		
Distillation _____	_____	_____		
IBP _____	_____	_____		
10% _____	_____	_____		
50% _____	_____	_____		
90% _____	_____	_____		
Dry Point _____	_____	_____		
API Gravity _____	_____	_____		
KB No. _____	_____	_____		
% Water _____	_____	_____		
Sol. in Water _____	_____	_____		
Sol. of Water in _____	_____	_____		
% Non-Volatile _____	_____	_____		
Iodine No. _____	_____	_____		

Storage Requirements _____

Toxicity & Handling Precautions _____

By _____

NOTES: 1. Ensure that all supplier technical data sheet specifications are indicated above.
 2. All Q.C. testing to be performed must be indicated by placing Tremco Standard Test Number above.
 3. Are supplier provided specifications the same as Trem Q.C specifications?
 If not, you must notify Purchasing and the supplier to ensure specifications can be met.

20893017

DATE: _____

CODE NUMBER: _____ CHEMICAL NAME: _____

RAW MATERIAL DATABASE

EXEMPT (Y/N): _____

SUDDEN RELEASE PRESS (Y/N): _____

EXEMPT DESIGNATOR: _____

IMMEDIATE HEALTH (Y/N): _____

HEALTH: _____

DELAYED HEALTH (Y/N): _____

FLAMMABILITY: _____

FIRE HAZARD (Y/N): _____

REACTIVITY: _____

REACTIVITY HAZARD (Y/N): _____

PERSONAL PROTECTION EQUIPMENT: _____

HAZARDOUS WASTE DATABASE

NON-HAZARDOUS RCRA (40CFR261) (Y/N): _____

WASTE DOT PROPER SHIP.'G NAME: _____

SPILL RESIDUE: _____

WASTE DOT/EPA REPORTABLE QUANTITY: _____

SPILL RESIDUE NUMBER: _____

WASTE DOT REQUIRED LABELS: _____

HAZARDOUS WASTE CODE: _____

WASTE DOT HAZARD CLASS: _____

HAZARDOUS WASTE NUMBER: _____

WASTE DOT I.D. NUMBER: _____

COMPATIBILITY GROUP: _____

WASTE DOT PACKAGING REG'S: _____

SUB-INGREDIENTS DATABASE

IS THIS AN ALTERNATE SOURCE OF AN EXISTING RAW MATERIAL? ☐ YES ☐ NO

IF YES, ARE THERE ANY CHANGES TO BE MADE TO THE SUB-INGREDIENTS DATA? ☐ YES ☐ NO

LIST NEW CHEMICALS (SUB-INGREDIENTS) OR REVERSE SIDE

<u>TREMCO DATA LINK#</u>	<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>FORM % (WT)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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CHEMICAL DATABASE

NEW CHEMICAL

CHEM LINK# _____

CHEMICAL NAME _____

CONFIDENTIAL NAME _____

CAS NUMBER _____

TOXIC EXPOSURE DATA _____

OTHER TOXIC DATA _____

IARC _____ NTP _____ OSHA _____ ACGIH _____ TPO _____

SARA 313 _____ SARA 302 _____ PROP 65 _____

TCLP _____ KENTUCKY AIR TOXIC _____

CERCLA _____ RCRA _____ TSCA-12 (b) _____

NEW CHEMICAL

CHEM LINK# _____

CHEMICAL NAME _____

CONFIDENTIAL NAME _____

CAS NUMBER _____

TOXIC EXPOSURE DATA _____

OTHER TOXIC DATA _____

IARC _____ NTP _____ OSHA _____ ACGIH _____ TPO _____

SARA 313 _____ SARA 302 _____ PROP 65 _____

TCLP _____ KENTUCKY AIR TOXIC _____

CERCLA _____ RCRA _____ TSCA-12 (b) _____

NEW CHEMICAL

CHEM LINK# _____

CHEMICAL NAME _____

CONFIDENTIAL NAME _____

CAS NUMBER _____

TOXIC EXPOSURE DATA _____

OTHER TOXIC DATA _____

IARC _____ NTP _____ OSHA _____ ACGIH _____ TPO _____

SARA 313 _____ SARA 302 _____ PROP 65 _____

TCLP _____ KENTUCKY AIR TOXIC _____

CERCLA _____ RCRA _____ TSCA-12 (b) _____

NEW CHEMICAL

CHEM LINK# _____

CHEMICAL NAME _____

CONFIDENTIAL NAME _____

CAS NUMBER _____

TOXIC EXPOSURE DATA _____

OTHER TOXIC DATA _____

IARC _____ NTP _____ OSHA _____ ACGIH _____ TPO _____

SARA 313 _____ SARA 302 _____ PROP 65 _____

TCLP _____ KENTUCKY AIR TOXIC _____

CERCLA _____ RCRA _____ TSCA-12 (b) _____

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INTERMEDIATES/FINISHED GOODS TSCA CONTROLS

- o R&D EXPERIMENTAL MATERIAL (EXEMPT) TO BE SHIPPED
 - o PIP WITH LABBOOK NUMBER* SUBMITTED TO BATCHCARD COORDINATOR
 - o CHECK FOR TSCA CERTIFICATION ON ALL RAW MATERIALS
 - o REQUEST VERIFICATION VIA FAX FROM SUPPLIER IF NECESSARY (PIP NOT PROCESSED UNTIL TSCA VERIFICATION RECEIVED)
 - o COMPLETE ENVIRONMENTAL COORDINATOR PORTION OF PIP (INCLUDES TSCA VERIFICATION QUESTIONS)
 - o PIP SUBMITTED TO PRODUCT SAFETY SPECIALIST
 - o "TSCA OK" INDICATED ON MSDS IF ALL COMPONENTS OF FINISHED PRODUCT ARE ON TSCA INVENTORY
 - o "R&D USE ONLY" INDICATED ON MSDS IF ANY COMPONENT OF FINISHED PRODUCT IS NOT ON THE TSCA INVENTORY
 - o PIP,MSDS,HAZARD WARNING SUBMITTED TO ENVIRONMENTAL MANAGER
 - o CHECK REACTION CHEMISTRY FOR TSCA VERIFICATION
 - o PMN FILED ON REACTION PRODUCT(S) IF NECESSARY
 - o COMPLETE ENVIRONMENTAL MANAGER PORTION OF PIP (INCLUDES QUESTIONS ON TSCA VERIFICATION FOR REACTION PRODUCT(S))
 - o R&D EXPERIMENTAL MAY BE SHIPPED
 - o SPECIAL RECORDKEEPING PROCEDURES ARE INITIATED, IF NECESSARY
 - o QUANTITY OF MATERIAL SHIPPED MUST BE RECORDED
 - o RECEIVER OF MATERIAL SHIPPED MUST BE RECORDED
 - o RECEIVER OF MATERIAL MUST BE NOTIFIED OF TSCA STATUS

*LABBOOK NUMBER ASSIGNED (FORMAT: AAAA-BB-CC-D)

A-SPECIFIC NUMBERED LABBOOK

B-SPECIFIC DEVELOPMENT CHEMIST ALPHA CODE

C-SPECIFIC PAGE NUMBER

D-ALPHA SEQUENCE IF MORE THAN ONE FORMULATION OR VARIATION PER PAGE

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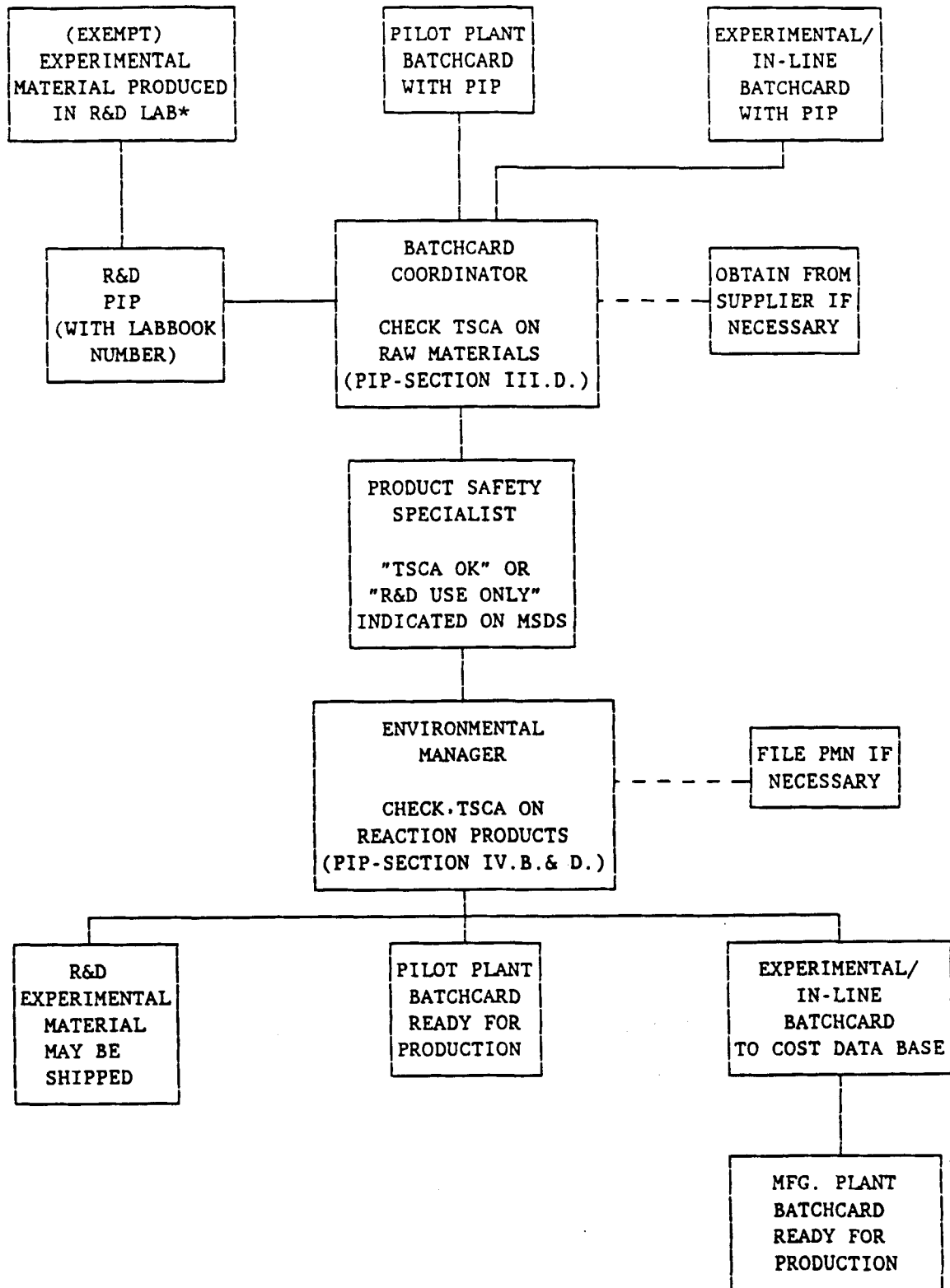
INTERMEDIATES/FINISHED GOODS TSCA CONTROLS

- o PILOT PLANT AND MANUFACTURING PLANTS PROCESSING OF BATCHCARD FOR MATERIAL TO BE PRODUCED
 - o BATCHCARD AND PIP SUBMITTED TO BATCHCARD COORDINATOR (PILOT PLANT CARD USES LABBOOK NUMBER
 - o MANUFACTURING PLANT CARD USES EXPERIMENTAL OR IN-LINE CODE NUMBER
 - o CHECK FOR TSCA CERTIFICATION ON ALL RAW MATERIALS
 - o REQUEST VERIFICATION VIA FAX FROM SUPPLIER IF NECESSARY (BATCHCARD PIP NOT PROCESSED UNTIL TSCA VERIFICATION RECEIVED)
 - o COMPLETE ENVIRONMENTAL COORDINATOR PORTION OF PIP (INCLUDES TSCA VERIFICATION QUESTIONS)
 - o BATCHCARD AND PIP SUBMITTED TO PRODUCT SAFETY SPECIALIST
 - o "TSCA OK" INDICATED ON MSDS IF ALL COMPONENTS OF FINISHED PRODUCT ARE ON TSCA INVENTORY
 - o "R&D USE ONLY" INDICATED ON MSDS AND LABEL IF ANY COMPONENT OF FINISHED PRODUCT IS NOT ON THE TSCA INVENTORY
 - o BATCHCARD, PIP, MSDS AND HAZARD WARNING SUBMITTED TO ENVIRONMENTAL MANAGER
 - o CHECK REACTION CHEMISTRY FOR TSCA VERIFICATION
 - o PMN FILED ON REACTION PRODUCT(S) IF NECESSARY
 - o COMPLETE ENVIRONMENTAL MANAGER PORTION OF PIP (INCLUDES QUESTIONS ON TSCA VERIFICATION FOR REACTION PRODUCT(S))
 - o BATCHCARD STAMPED AS REVIEWED FOR TSCA REQUIREMENTS
 - o STAMPED INDICATING PMN FILED IF NECESSARY
 - o MANUFACTURING PLANT BATCHCARDS SUBMITTED TO COST FOR ENTRY TO DATA BASE (THIS STEP IS OMITTED FOR PILOT PLANT BATCHCARDS)
 - o BATCHCARD IS SENT TO PLANT READY FOR PRODUCTION
 - o SPECIAL RECORDKEEPING PROCEDURES ARE INITIATED, IF NECESSARY
 - o QUANTITY OF MATERIAL SHIPPED MUST BE RECORDED
 - o RECEIVER OF MATERIAL SHIPPED MUST BE RECORDED
 - o RECEIVER OF MATERIAL MUST BE NOTIFIED OF TSCA STATUS

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INTERMEDIATES/FINISHED GOODS TSCA CONTROLS



*LABBOOK NUMBER ASSIGNED (FORMAT: AAAA-BB-CC-D)

BFG07811

20893022

PRODUCT INFORMATION PROFILE

TRESCO Product Code No. _____ TRESCO Product Registry No. _____

Batchcard Priority RUSH [] NORMAL [] If rush, state date required _____
SIGNATURE DATE COMPLETED

1. Development Chemist	_____	_____
2. Group Manager	_____	_____
3. Batchcard Coordinator	_____	_____
4. Product Safety Specialist	_____	_____
4a. Plant D.O.T. Specialist	_____	_____
5. Batchcard Coordinator	_____	_____
6. Industrial Hygienist	_____	_____
7. Batchcard Coordinator	_____	_____
8. Manager-Environmental Affairs	_____	_____
9. Batchcard Coordinator	_____	_____

Chemist Name _____ Lab Book Number _____

Card Issue Date _____ Product Name (per Marketing) _____

Product Class(Flooring, Coating, etc)_____ Application(Brush, Spray, etc)_____

Previous TREMCO Experimental Code Number (If applicable) _____

Actual Production Location(s):

I. DEVELOPMENT CHEMIST SECTION

A. Indicate type of card:

Pilot Plant Card	[[	White Card	[[	Alternate Card	[[
------------------	----	------------	----	----------------	----

Experimental Card ☐ Pink Card ☐ Purchase for Resale ☐

Indicate below the reason for issuing this batchcard. This reason is also to be indicated on the batchcard in the Remarks/Special Remarks Section of batchcard.

B. Does the formulation include intermediates? (If no, go to Question F)

Yes ☐ No ☐

C. Do the intermediates involve a chemical reaction? (If no, go to Question E)

Yes ☐ No ☐

D. List the Intermediate Code Numbers below and in Section V.A. which involve chemical reactions:

三、

E. List any special storage conditions required for any of the Intermediates.

F. Does a chemical reaction occur in this formulation on this batchcard?
(If no, go to Question H) Yes ☐ No ☐

G. List the Raw Material/Intermediate Reactant Code Numbers and describe reaction chemistry below and in Section V.C.

H. List any special storage conditions required for any of the raw materials.

I. Are there Raw Material Spec Sheets for all raw materials in this formulation and are these appropriate? Yes ☐ No ☐ (If yes, go to Question J)

If no, a new code number must be obtained and a new raw materials spec sheet must be prepared and given to the Environmental Administrator.

J. List any special storage conditions required for the product.

K. Are the Quality Control Procedures and Specifications established in the Q.C. Section of the batchcard and are these correct? Yes ☐ No ☐

(If revised card, ensure Q.C. specifications have not changed.)

L. Indicate the old stock check period for the product.

M. What is the product maximum shelf life from date of packaging?

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N. Indicate the following physical/chemical characteristics. All information must be generated by the development chemist or by the Technical Services Group.

ALL BLANKS MUST BE COMPLETED
(* = complete if flashpoint <140°F)

Weight/Gallon	_____	Color	_____
Specific Gravity	_____	Physical State	_____
Melting Point	_____	Evaporation Rate	_____
Boiling Point	_____	Odor	_____
Freezing Point	_____	Flashpoint	_____
Softening Point	_____	Method(TAG, SETA, etc.)	_____
Vapor Pressure	_____	Upper Explosive Limit(UEL)	_____
*Vapor Pressure @ 55°C	_____ mm	*Corrosive to Skin	☐ Yes ☐ No
*Viscous Liquids Only		*Burn Rate Test (Potential Flammable	
*Viscosity Test ISO 2431-72	_____	Solids only)	_____
*Solvent Separation Test ISO R1523-73	_____		
Vapor Density(Air=1)	_____	Lower Explosive Limit(LEL)	_____
pH (Aqueous)	_____	Decomposition Temperature	_____
Solubility in Water	_____	Autoignition Temperature	_____
% Volatile By Weight	_____		
Molecular Weight (If single substance)	_____		

Comments: _____

O. Does the batchcard show:

Issue Date	Yes ☐	No ☐	Flashpoint (Liquids Only)	Yes ☐	No ☐
Weight/Gallon	Yes ☐	No ☐	Chemist Initials	Yes ☐	No ☐

If no, state reason: _____

P. Is this product potentially:

- (1) Ignitable Yes ☐ No ☐ (40 CFR 261.21)(D001)
(Liquid @ 100°F - Flashpoint < 140°F)
(Solid @ 100°F - Burns "vigorously and persistently")
- (2) Corrosive Yes ☐ No ☐ (40 CFR 261.22)(D002)
(pH <2.0 or pH >12.5 for aqueous products)
(Corrosive to SAE 1020 Steel >2.35 mm/year)(ie., DOT Corrosive Liquids)
(Does NOT include DOT skin corrosives)
- (3) Water Reactive Yes ☐ No ☐ (40 CFR 261.23)(D003)
(Does product react violently with water or generate toxic gases or fumes on addition of water?)(Does NOT include moisture sensitive polyurethanes)
- (4) TCLP (Toxicity Characteristic Leaching Procedure)
Does the product contain any of the following: Yes ☐ No ☐
(Indicate total contents down to 0.1 ppm.)

	CAS NO.	
D004--Arsenic.....	7440-38-2	_____
D005--Barium.....	7440-39-3	_____
D018--Benzene.....	71-43-2	_____
D006--Cadmium.....	7440-43-9	_____
D019--Carbon tetrachloride.....	56-23-5	_____

	CAS NO.	
D020--Chlordane.....	57-74-9	_____
D021--Chlorobenzene.....	108-90-7	_____
D022--Chloroform.....	67-66-3	_____
D007--Chromium.....	7440-47-3	_____
D023--o-Cresol*.....	95-48-7	_____
D024--m-Cresol*.....	108-39-4	_____
D025--p-Cresol*.....	106-44-5	_____
D026--Cresol.....		_____
D016--2,4-D.....	94-75-7	_____
D027--1,4-Dichlorobenzene.....	106-46-7	_____
D028--1,2-Dichloroethane.....	107-06-2	_____
D029--1,1-Dichloroethylene.....	75-35-4	_____
D030--2,4-Dinitrotoluene.....	121-14-2	_____
D012--Endrin.....	72-20-8	_____
D031--Heptachlor (and its hydroxide).....	76-44-8	_____
D032--Hexachlorobenzene.....	118-74-8	_____
D033--Hexachlorobutadiene.....	87-68-3	_____
D034--Hexachloroethane.....	67-72-1	_____
D008--Lead.....	7439-92-1	_____
D013--Lindane.....	58-89-9	_____
D009--Mercury.....	7439-97-6	_____
D014--Methoxychlor.....	72-43-5	_____
D035--Methyl ethyl ketone.....	78-93-3	_____
D036--Nitrobenzene.....	98-95-3	_____
D037--Pentachlorophenol.....	87-86-5	_____
D038--Pyridine.....	110-86-1	_____
D010--Selenium.....	7782-49-2	_____
D011--Silver.....	7440-22-4	_____
D039--Tetrachloroethylene.....	127-18-4	_____
D015--Toxaphene.....	8001-35-2	_____
D040--Trichloroethylene.....	79-01-6	_____
D041--2,4,5-Trichlorophenol.....	95-95-4	_____
D042--2,4,6-Trichlorophenol.....	88-06-2	_____
D017--2,4,5-TP (Silvex).....	93-72-1	_____
D043--Vinyl chloride.....	75-01-4	_____

(5) Is this compound specifically on either the 40 CFR 261.33 (e) or (f) list: (This question only applies to single specific chemical substances.) Yes[] No []

Q. Based on your review of raw materials and intermediates MSDS's, list any known health hazards:

R. List any special handling requirements including safety or handling procedures, personal protective equipment, etc...

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- S. List any of the raw materials or intermediates contained in this formulation which are received with DOT markings or labels:

Code #	DOT Marking or Label Wording
_____	_____
_____	_____
_____	_____

- T. To the best of your knowledge, during production processes are there:

(1) Wastewaters? (Water cleanouts or azeotropes)	Yes ☐	No ☐
(2) Waste Solvents? (Cleanout solvents or azeotropes)	Yes ☐	No ☐
(3) Air Emissions? (Vented or fugitive)	Yes ☐	No ☐
(4) Waste Products? (Mixer cleanout, scrap, etc.)	Yes ☐	No ☐
(5) Personnel Exposures? (Uncontrolled or controlled)	Yes ☐	No ☐

Please consult with plant process engineering and explain details of any items marked "Yes" above. Be specific about quantities, types and ultimate emission or discharge location: _____

- U. Complete 100% formulation in Sections VI and VII and indicate components which should be maintained as confidential. If confidential, give maximum weight percent and generic names to be used on MSDS and label. If SARA 313 chemical, complete SARA substantiation form. If any of the individual components react, indicate in Section V.B. See Environmental Affairs Group for assistance in completing this section.

- V. List here and in Section II.C. all packaging requirements for this product (Include container code numbers specifications and sizes to be packaged as indicated by Marketing Product Manager and approved by Plant):

<u>Code Number</u>	<u>Package Size</u>	<u>Spec</u>
(-257, -278, etc)		(17H, 17E, etc.)
		(Metal, Lined, etc.)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- W. Please state any other special conditions of which the plant should be aware.

X. VOC

- (1) Does this product contain VOC? Yes ☐ No ☐ (If no, go to Question Y)
- (2) Is this an architectural coating under SCAQMD Rule 1113? Yes ☐ No ☐
(If yes, go to Question X (4)).
- (3) What is level of "VOC"(g/L)_____
- (4) What is level of "VOC Less Water Less Exempt Solvent"(g/L)_____
- (5) Coating Type:
- | | |
|---|--|
| ☐ Concrete curing compound | ☐ Primer, sealer or undercoater |
| ☐ Fire retardant coating
(opaque) | ☐ Quickdry primer, sealer
or undercoater |
| ☐ Fire retardant coating
(transparent or translucent) | ☐ Roof coating |
| ☐ Industrial maintenance primer
or topcoat | ☐ Tile-like glaze coating |
| ☐ Mastics texture coating | ☐ Traffic coating |
| ☐ Metallic pigmented coating | ☐ Urethane coating |
| ☐ Other | ☐ Waterproofing mastic coating |
| | ☐ Waterproofing sealer |
- (6) Is this material photochemically reactive? Yes ☐ No ☐ OR
Is this product exempt? Yes ☐ No ☐
If exempt, list exemption_____ OR
Is this product regulated under Rule 1168 as an adhesive? Yes ☐ No ☐
- Y. If a pilot plant card, an experimental card or a pink card, must R&D monitor batch?
Yes ☐ No ☐ N/A ☐
If yes, give name: _____
- Z. Date required to be available for shipment (If ASAP, Inventory Control must advise
Field Service as to the estimated date the material will be available for shipment):

Chemist's Signature

Date

Group Manager's Signature

Date

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II. PRODUCT SAFETY SPECIALIST/INDUSTRIAL HYGIENIST

- A. (1) Complete Material Safety Data Sheet worksheet in Section VII.
- (2) Have Material Safety Data Sheets (MSDS's) been written on intermediates and given to Batchcard Coordinator? Yes ☐ No ☐ No Intermediates ☐
- (3) Have MSDS's been written on this formulation and been given to the Batchcard Coordinator?
- Yes ☐ Give issue date: _____ No ☐
- (4) If no, does a current MSDS cover this product?
- Yes ☐ Give code number: _____ No ☐
Give issue date: _____
- (5) Does this MSDS indicate this additional coverage? Yes ☐ No ☐
- (6) If no to 4 or 5 above, attached new or revised MSDS.
- (7) Complete MSDS Association Table.
- B. Please complete HMIS ratings for raw materials and this formulation in Section VI. Place HMIS rating for this formulation on batchcard.
- C. Indicate below the package specification code number suffix (-257,-278,-202,etc.) indicated by Marketing, Engineering Services and productions facilities for each intermediate and finished good:
- | <u>Code Number</u>
(-257,-278,etc.) | <u>Package Size</u> | <u>Spec</u>
(17H,17E,etc.)
(Metal,Lined,etc.) | <u>Label Necessary</u> |
|--|---------------------|---|--|
| _____ | _____ | _____ | Yes ☐ No ☐ |
| _____ | _____ | _____ | Yes ☐ No ☐ |
| _____ | _____ | _____ | Yes ☐ No ☐ |
| _____ | _____ | _____ | Yes ☐ No ☐ |
- To be determined by: _____
- D. For each package size indicated above, where labels are necessary, are labels on file with Divisional Label Coordinator, and are the precautionary statements correct?
- Yes ☐ No ☐ Use Experimental Label ☐ Use HMIS Label ☐
- E. If no, has Divisional Label Coordinator been contacted and has a Label Change Form been initiated? Yes ☐ No ☐
- F. Are formats and labels correct? Yes ☐ No ☐

Product Safety Specialist's Signature

Date

III. PLANT D.O.T. SPECIALIST

A. Complete DOT Shipping Information:

Product Proper Shipping Name _____
Product Required Labels _____
Product Hazard Class _____
Product UN/NA Number _____
Product Limited Quantity Exclusions _____
Product Packaging Reg.'s _____
Product Emergency Response Guide Sheet Number _____
Product Red Label Rating* _____
Product UN Shipping Name _____
Product UN Hazard Class _____
Product UN Packaging Group _____
Product Additional IATA Packaging Group _____
Product Marine Pollutant ☐ YES ☐ NO
Product Uniform Freight Name _____
Product Freight Classification Number _____
Product Freight Packaging Class _____
Waste Proper Shipping Name _____
Waste Required Labels _____
Waste Hazard Class _____
Waste UN/NA Number _____
Waste Reportable Quantity _____
Waste I.D. Number _____
Waste Packaging Reg.'s _____

*Red Label Ratings:

0-Non-Regulated DOT

1-Flammable Liquid (Flammable Liquid Label Required)

2-Flammable Liquid, Limited Quantity (No Flammable Liquid Label Required)

3-Poison B, Liquid, NOS UN2810 (Poison Label Required)(Only applies to Tremstrip 20)

4-Corrosive Liquid, Limited Quantity (No Corrosive Liquid Label Required)

5-Corrosive Liquid (Corrosive Liquid Label Required)

6-Flammable Liquid, Corrosive, NOS UN2924 (Both a Corrosive Liquid and Flammable Liquid Label Required)(Only applies to Tropical Grade THC-900)

Plant D.O.T. Specialist's Signature _____

Date _____

IV. ENVIRONMENTAL COORDINATOR SECTION

- A. Have MSDS's for 99-numbered compounds been forwarded to the Production Plant Q.C. Laboratory and Pilot Plant? Yes ☐ No ☐ N/A ☐
If no, are these attached: Yes ☐ No ☐
If no, state reason: _____
- B. Have MSDS's for permanent raw material code numbered compounds been sent to Distribution Lists for indicated production facilities? Yes ☐ No ☐
If no, are these attached: Yes ☐ No ☐
If no, state reason: _____
- C. Have Raw Material Spec Sheets been received from Chemist and forwarded to Purchasing Departments and Q.C. Departments on all raw materials? Yes ☐ No ☐
If no, are these attached? Yes ☐ No ☐
If no, state reason: _____
- D. Have TSCA Certification Letters been received on all raw materials? Yes ☐ No ☐
If no, list code numbers and reasons:

- E. Have MSDS's been written and distributed on all Intermediates in this formulation?
Yes ☐ No ☐ No Intermediates ☐
- F. Has a MSDS been written and distributed on this formulation? Yes ☐ No ☐
If no, are these attached: Yes ☐ No ☐
If no, state reason: _____
- G. Does this product contain chemicals on the Kentucky Air Toxic listing (401 KAR 63:022)? Yes ☐ No ☐ If yes, list in Section V.G.
- H. Does this product contain chemicals identified in Section 302 (40 CFR 355) or Section 313 (40 CFR 372) of SARA Title III? Yes ☐ No ☐ If yes, list in Section V.H. and/or V.I.
- I. Does this product contain a CERCLA hazardous substance (40CFR302.4)? Yes ☐ No ☐
If yes, list in Section V.J.
- J. Does this product contain chemicals identified in Proposition 65? Yes ☐ No ☐
If yes, list in Section V.K.

Environmental Coordinator's Signature

Date

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V. ENVIRONMENTAL AFFAIRS SECTION

- A. The following Intermediates are reaction products:
(To be completed by Chemist)

Intermediates

N/A ☐

Approved _____
Manager - Environmental Affairs

If N/A, go to "C" below.

- B. Are all of above Intermediates registered on EPA/TSCA Inventory?

Yes ☐ No ☐ CAS# _____

If no, give the date of PMN submission and date production may potentially begin if PMN clears EPA or give reason for experimental production:

PMN Submission Date: _____

Proposed Production Date: _____

Reason for Experimental Production: _____

NOTE: If experimental, production requirements of TSCA Research and Development Exemption outlined in the September 6, 1986, memo must be complied with.

- C. The following Raw Material/Intermediate Code Numbers react by the following chemistry in the product:

N/A ☐

Approved _____
Manager - Environmental Affairs

If N/A, go to "E".

- D. Is the reaction product on the EPA/TSCA Inventory?

Yes ☐ No ☐ CAS# _____

If no, give the date of PMN submission and date production may potentially begin if PMN clears EPA or give reason for experimental production:

PMN Submission Date: _____

Proposed Production Date: _____

Reason for Experimental Production: _____

NOTE: If experimental, production requirements of TSCA Research and Development Exemption outlined in the September 6, 1986, memo must be complied with.

- E. From information given in Section I.P., list below the RCRA Hazardous Waste characteristics and the Tremco compatibility group for disposal purposes:

Hazardous Waste Code: _____

Hazardous Waste Number: _____

TREMCO Compatibility Group _____

Is testing necessary? Yes ☐ No ☐

If yes, have samples been submitted? Yes ☐ No ☐

Place compatibility groups on batchcard.

- F. Based on Section I.T. above, are there special procedures that need to be implemented into current plant environmental programs (i.e., wastewater analyses, personnel exposure monitoring, etc.)? Yes ☐ No ☐

Comments: _____

- G. Kentucky Air Toxic listing (401 KAR 63:022):

Chemical Name	% (WT)	CAS #
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- H. Section 302 (40 CFR 355) of SARA Title III:

Chemical Name	% (WT)	CAS #	RQ	TPQ
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

- I. Section 313 (40 CFR 372) of SARA Title III:

Chemical Name	%,(WT)	CAS #
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- J. CERCLA Hazardous Substances (40 CFR 302.4):

Chemical Name	% (WT)	CAS #	RQ
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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K. Proposition 65):

Chemical Name	% (WT)	CAS #

Manager - Environmental Affairs Signature

Date

PIP.FRM

20893034

VI. 100% FORMULATION

Product Code Number _____ Date _____

Product Name _____

A. Development Chemist

Product Safety Specialist

[illegible]

FORMULATION RATING: _____

B. Internal Reaction Products

1.	_____	

	TOTAL	_____ . _____
2.	_____	

	TOTAL	_____ . _____

3. _____

 TOTAL _____

4. _____

 TOTAL _____

MSDS WORKSHEET

PRODUCT CODE NAME: _____

PRODUCT CODE NUMBER: _____

DATE: _____

VI. * R & D CONFIDENTIAL INFORMATION *

A. - 100% Formulation Breakdown - To be completed by Development Chemist (include complete breakdown of all raw materials and intermediates). See the EAG if your formulation involves a reaction.

Tremco % Wt Formu- **Confidential- SARA Max WT%

Code No*	lational	dential	313 (If Confid-Y)	Specific Chemical Name	**Confidential	Generic Chemical Name (if Confid-Y)	CAS Number	Chem-Link#
----------	----------	---------	-------------------	------------------------	----------------	-------------------------------------	------------	------------

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

N/Y

* For specific chemical name and qualified suppliers, see raw material spec sheets.

** Must qualify as trade secret under OSHA "back engineering" test, and

If SARA Title III - Section 313 Toxic chemical, must pass substantiation test and substantiation form must be attached.

Prepared By: _____

000316

BFG07825

MINOR MODIFICATION FORM

Product Line Code _____ Original Product Registry Number _____

TRESCO Product Name _____

Batchcard Priority: ☐ Normal ☐ Rush (If Rush, state date required _____)

Issue Date _____ Lab# _____ Previous Experimental# _____

Production Locations _____

I. A. Type of card: ☐ Pilot Plant ☐ Experimental ☐ White ☐ Pink

B. Type of Modification:

- ☐ Process change only (hold times, mixing speeds, orders of addition, etc.)
- ☐ New raw material (<0.1%)*
- ☐ Alternate supplier of existing raw material (<0.1% impurities)*
- ☐ Small "tweeking" (<1.0% change of total batch) of existing raw materials**

*If >0.1% change, a new PIP must be filed

**If >1.0% change, a new PIP must be filed

C. Are there any changes in the existing chemistry (i.e., 100% formulation on MSDS) or reaction chemistry occurring?

☐ No ☐ Yes (If 'Yes', you cannot use this form; a new PIP must be filed)

D. List all changes you are making to the original recipe (i.e., batchcard):

Chemist Signature _____ Date _____

Group Manager Signature _____ Date _____

Batchcard Coordinator _____ Date _____

II. 100% Formulation

A. RM Code # % Formulation

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

B. Internal Reaction Chemistry

1.	_____	

	Total	_____
2.	_____	

	Total	_____
3.	_____	

	Total	_____

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CARD TYPES

I. PILOT PLANT CARD

- A. Uses lab book number and PPK (Pilot Plant Kinsman) number only.
- B. Assigned and controlled through R&D Department.
- C. Used for pilot plant production only (R&D lab production will be done in R&D lab book).
- D. The card must be stamped PILOT PLANT CARD.
- E. All raw materials are expensed to R&D account.
- F. Will not be inventoried.
- G. Will not be set up on data base.
- H. The reason for using a PILOT PLANT CARD formulation must be stated in the remarks section of the card.

II. EXPERIMENTAL CARD

- A. First time experimental formulations only (Limited number of batches. Subsequent production of modified formulations will be on PINK card ONLY).
- B. All raw materials, intermediates and finished goods be inventoried.
- C. Formula number will be set up on data base.
- D. Must be converted to in-line code to be sold beyond experimental quantities (See Formula Number Assignment section).
- E. May contain '99' numbers.
- F. The card must be stamped EXPERIMENTAL CARD.
- G. Requires special formula number designation (See Formula Number Assignment section).
- H. The reason for using an EXPERIMENTAL CARD formulation must be stated in the remarks section of the card.

III. PINK CARD

- A. Used for a modified formulation of an existing WHITE or EXPERIMENTAL card if, and only if, the difference in the formulation does not require a revision to the existing MSDS or label. (Should a revision be necessary, the card must be processed as an EXPERIMENTAL card or a different WHITE card, so that a unique code number will distinguish it from the existing EXPERIMENTAL or WHITE card.
- B. The formula number and issue date remains the same as the related WHITE or EXPERIMENTAL card.

- C. Will not be set up on data base.
- D. Inventory must be segregated using batch number (if necessary).
- E. May enter production manually using non-standard production inventory transactions or as standard production with miscellaneous inventory adjustments for differences in component usages.
- F. The card must be stamped PINK CARD.
- G. Should be used whenever the modified formulation will be sold under the existing formula number.
- H. May be used to test as many different formulations as needed.
- I. The reason for using a PINK CARD formulation must be stated in the remarks section of the card.

IV. ALTERNATE CARD
(PROCESSED AT PLANT LEVEL. THIS CARD IS NOT ROUTED THROUGH THE ENVIRONMENTAL AFFAIRS GROUP)

- A. Used for final or in-line formulation of product for a scaled batch size of an existing WHITE or EXPERIMENTAL card or for use of non-standard production equipment.
- B. The formula number remains the same as the related WHITE or EXPERIMENTAL card.
- C. Will not be set up on data base.
- D. Enter as standard production with miscellaneous inventory adjustments for differences in component usages due to computer scaling. These adjustments should be summarized at bottom of card.
- E. The card must be stamped ALTERNATE CARD.
- F. Should be used whenever the scaled formulation will be sold under the existing formula number.
- G. The reason for using an ALTERNATE CARD formulation must be stated in the remarks section of the card.

V. WHITE CARDS

- A. Used for final or in-line formulation of product for full scale production on standard equipment.

CARD AUTHORIZATION REQUIREMENTS

I. WHITE, EXPERIMENTAL, PINK CARDS

- A. Plant approval of faxed handwritten draft will be as follows:
 - 1. Kinsman - Process Engineering Manager
 - 2. Vernon - Plant Manager
 - 3. Columbus - P.&I.C. Manager
 - 4. Barbourville - P.&I.C. Manager
 - 5. Felt - Process Engineer
- B. R&D Signatures
 - 1. Originating Chemist
 - 2. Group Manager
 - 3. Product Safety Specialist
 - 4. Industrial Hygienist
 - 5. Division Manager, Environmental Affairs Group
- C. Plant signatures for final, typed copies will be as follows (If a designated representative signs instead of one of the below, it should be indicated for whom they are signing):
 - 1. Kinsman - Process Engineer or Plant Manager
 - 2. Vernon - Process Engineer or Plant Manager
 - 3. Columbus - Process Engineer and Plant Manager
 - 4. Barbourville - Process Engineer and Plant Manager
 - 5. Felt - Department Manager or Plant Manager or Division Manufacturing Manager or Inventory Control Manager or Quality Control Supervisor
- D. Cost Department

II. PILOT PLANT CARD

- A. Signatures will be as follows (If a designated representative signs instead of one of the below, it should be indicated for whom they are signing):
 - 1. Originating Chemist
 - 2. Group Manager
 - 3. Pilot Plant Manager
 - 4. Product Safety Specialist
 - 5. Industrial Hygienist
 - 6. Division Manager, Environmental Affairs Group

FORMULA NUMBER CODE ASSIGNMENTS

I. RAW MATERIALS

- A. Experimental codes (99 numbers)
 - 1. Requested through the EAG Environmental Administrator.
 - 2. Requester must supply all required information before code is issued.
- B. Permanent Raw Material Code Numbers
 - 1. Requested through the EAG Environmental Administrator.
 - 2. Requester must supply all required information before code is issued.
 - 3. Raw Material Spec Sheet must be completed and given to the Environmental Administrator before a code number will be given out for chemical raw materials. For non-chemical raw materials, the Environmental Administrator will contact the respective Purchasing Department in order to insure Purchasing has the necessary information and paper work on file.
 - 4. When ready to assign a permanent code for a previous 99 number code, the Environmental Administrator will request a current 'Where Used' listing and notify appropriate batchcard and format personnel. New cards must be issued reflecting new permanent raw material code number. This applies only to the cards expected to be active again.

II. FINISHED GOODS, INTERMEDIATES AND PURCHASE FOR RESALE ITEMS

- A. Finished Goods and Purchase for Resale items.
 - 1. Requested through designated divisional personnel who, in turn, request through the Cost Department Data Base Coordinator.
 - 2. Divisional Coordinator
 - a. Michelle Mikol - Roofing
 - b. Ruth Prokop - Sealants, Automotive Aftermarket
 - c. Susan Stringer - International
- B. Intermediates
 - 1. Requested through the Cost Department Data Base Coordinator.

III. EXPERIMENTAL CODES

- A. Requested through designated divisional personnel who in turn request through the Cost Department Data Base Coordinator.
- B. A special series is used which identifies this formula number as experimental and the plant location.
 - 1. Kinsman - Line #-XK01-Package Code (ie., 361-XK01-996)
 - 2. Vernon - Line #-XL01-Package Code (ie., 364-XL01-996)
 - 3. Barbourville - Line #-XB01-Package Code (ie., 897-XB01-996)
 - 4. Columbus - Line #-XA01-Package Code (ie., 950-XA01-996)
 - 5. Felt - Line #-XE01-Package Code (ie., 036-XE01-996)
- C. Must be assigned an in-line code to be sold beyond experimental quantities.

PREPARATION AND ROUTING

I. PILOT PLANT CARD

- A. Handwritten card prepared by Originating Chemist in conjunction with Pilot Plant Operator and Pilot Plant Manager, or prepared by the Pilot Plant Manager and/or the Divisional Plant Process Engineer in conjunction with R&D Chemist and forwarded to R&D Chemist.
- B. Card initialed by Originating Chemist and Group Manager. Originating Chemist will submit Product Information Profile (PIP, completed by Chemist) and initialed batchcard to Designated Typist*, who will then submit all paperwork to Batchcard Coordinator at least ten days prior to proposed first production date.
- C. Batchcard Coordinator will make copies and complete routing for EAG and Pilot Plant approvals (See CARD AUTHORIZATION REQUIREMENTS).
- D. Upon obtaining Pilot Plant and EAG approvals, the Batchcard Coordinator will distribute batchcards as follows:
 1. Pilot Plant (with copy of PIP)
 2. Pilot Plant Manager
 3. Originating Chemist
 4. EAG files

II. WHITE AND EXPERIMENTAL CARDS

- A. Handwritten draft prepared by Originating Chemist, who submits it to Designated Typist to fax to production plant for review/changes.
- B. Upon completion of review, plant faxes approved/changed draft back to Designated Typist to submit to Originating Chemist for review (Steps A and B will continue until draft is satisfactory to plant and Originating Chemist).
- C. Originating Chemist submits approved draft to Designated Typist, who types the batchcard and returns both to Originating Chemist for his/her initials, as well as the initials of the Group Manager.
- D. PIP (Chemist Section) will be completed by Originating Chemist.
 1. WHITE CARDS
 - a. A new PIP must be completed for a WHITE card if a batchcard Checklist or a PIP is currently not on file, or where in the "best professional judgment" of the chemist, the modification from the original formulation has increased the hazards from the existing formulation to the new modified formulation.
 - b. If a new PIP is not required, a "Minor Modification" form (MMF) must be completed to accompany the WHITE card through the system.
 - c. The 100% formulation and MSDS worksheet must be completed for each PIP submitted (with MMF, only 100% formulation required).
 - d. The PIP/MMF must also be signed by the Group Manager.

*Designated Typist - Mary Coleman, Sealants/ Bea Williams, Roofing

2. EXPERIMENTAL CARDS

a. A new PIP must be completed for all EXPERIMENTAL cards.

- E. PIP/MMF, batchcard and approved draft copy should be given to Designated Typist, who will then submit all paperwork to Batchcard Coordinator at least ten days prior to proposed first production date.
- F. Batchcard Coordinator will route PIP/MMF and five copies of the batchcard for EAG approvals.
- G. Upon completion of EAG approvals, Batchcard Coordinator will forward five batchcards to production plant for signatures.
- H. After all plant signatures are obtained, plant will return all five batchcards to Batchcard Coordinator.
- I. Batchcard Coordinator will forward four batchcards to Cost, and one copy of PIP/MMF to designated plant personnel. Batchcard Coordinator will maintain original PIP/MMF and one copy of batchcard for EAG files.
- J. The Cost Department Data Base Coordinator will load batchcard on data base, generally within two days, and Cost will distribute stamped batchcards for Sealant and Roofing Divisions as follows:
 - 1. Cost Department
 - 2. Inventory Control
 - 3. Process Engineering
 - 4. Batchcard Coordinator for EAG files

III. PINK CARDS

- A. Handwritten draft prepared by Originating Chemist, who submits it to Designated Typist to fax to production plant for review/changes.
- B. Upon completion of review, plant faxes approved/changed draft back to Designated Typist to submit to Originating Chemist for review (Steps A and B will continue until draft is satisfactory to plant and Originating Chemist).
- C. Originating Chemist submits approved draft to Designated Typist who types the batchcard and returns both to Originating Chemist for his/her initials, as well as the initials of the Group Manager.
- D. PIP/MMF (Chemist Section) will be completed by Chemist.
 - 1. A new PIP must be completed for a PINK card if a batchcard Checklist or a PIP is currently not on file, or where in the "best professional judgment" of the chemist, the modification from the original formulation has increased the hazards from the existing formulation to the new modified formulation.
 - 2. If a new PIP is not required, a MMF must be completed to accompany the PINK card through the system.
 - 3. The 100% formulation and MSDS worksheet must be completed for each PIP submitted (with MMF, only 100% formulation required).
 - 4. PIP/MMF must be signed by Group Manager.

- E. PIP/MMF, batchcard and approved draft copy should be given to the Designated Typist who will submit all paper to Batchcard Coordinator at least ten days prior to proposed first production date.
- F. Batchcard Coordinator will route PIP/MMF and three batchcards for remaining EAG approvals.
- G. Upon completion of EAG approvals, Batchcard Coordinator will forward three batchcards to production plant for signatures and a completed copy of PIP/ MMF to designated plant personnel.
- H. After all plant signatures are obtained, plant will distribute as follows:
 - 1. Inventory Control (with copy of PIP/MMF)
 - 2. Process Engineering
 - 3. Batchcard Coordinator for EAG files

EXCEPTIONS TO PREPARATION AND ROUTING PROCEDURES

I. ARTICLE EXEMPTIONS (FELT PLANT)

- A. Includes the following:
- | | |
|----------|--------------|
| 008-line | 038-line |
| 014-line | 407-325-601 |
| 024-line | 407-329-601 |
| 028-line | 407-329S-601 |
| 034-line | 407-425-601 |
| 036-line | 407-425S-601 |
| 037-line | 407-429-601 |
- B. Draft prepared by Originating Chemist in conjunction with Roofing Division Plant Manager or Felt Process Engineer, or prepared by Roofing Division Plant Manager or Felt Process Engineer in conjunction with R&D Chemist and forwarded to R&D Chemist.
- C. Draft submitted to Divisional Secretary, who types batchcard and returns typed card and draft to Chemist. If card has been typed by Plant, this step is omitted.
- D. Card is approved and initialed by Chemist and Group Manager. Batchcard is then submitted to plant by R&D Chemist.
- E. Upon obtaining plant signatures, batchcards are returned to R&D Chemist.
- F. R&D Chemist submits approved typed batchcards to Batchcard Coordinator.
- G. Batchcard Coordinator will stamp cards "ARTICLE - EXEMPT" and forward four batchcards to Cost. Batchcard Coordinator will maintain one copy of batchcard for EAG files.
- H. The Cost Department Data Base Coordinator will load batchcard on data base, generally within two days, and Cost will distribute batchcards as follows:
1. Cost Department
 2. Inventory Control
 3. Process Engineering
 4. Batchcard Coordinator for EAG files

II. 159-LINE INTERMEDIATES (FELT PLANT)

- A. Handwritten draft prepared by Originating Chemist, who submits it to Divisional Secretary to fax to production plant for review/changes.
- B. Upon completion of review, plant faxes approved/changed draft back to Divisional Secretary to submit to Originating Chemist for review (Steps A and B will continue until draft is satisfactory to plant and Originating Chemist).
- C. Originating Chemist submits approved draft to Divisional Secretary who types the batchcard and returns both to Originating Chemist for his/her initials, as well as the initials of the Group Manager.
- D. Batchcard and approved draft copy should be given to Divisional Secretary, who

- E. Batchcard Coordinator (as designated personnel) will generate copies, stamp remaining EAG approvals on batchcards and forward five batchcards to plant for signatures.
- F. Upon completion of plant signatures, cards will be returned to Batchcard Coordinator, who will then send four copies of batchcard to Cost Department and one copy of PIP/MMF to designated plant personnel. Batchcard Coordinator will maintain one copy of batchcard for EAG files.
- G. The Cost Department Data Base Coordinator will load batchcard on data base, generally within two days, and Cost will distribute batchcards as follows:
 - 1. Cost Department
 - 2. Inventory Control
 - 3. Process Engineering
 - 4. Batchcard Coordinator for EAG files

(NOTE: Initiator - person bringing a purchase for resale into the Company)

- IV. SPECIAL COLORS - SPECTREM 1 AND SPECTREM 2

- 9

BFG07835

0055046

2. Inventory Control
3. Process Engineering
4. Batchcard Coordinator for EAG files

V. ADHESIVES SYSTEM DIVISION - BFG

- A. Batchcard is typed at BFG and approved by Originating BFG Chemist prior to submittal to the Batchcard Coordinator.
- B. Originating BFG Chemist will complete PIP (Chemist Section) and submit to Batchcard Coordinator, along with batchcard and raw material MSDS backup for the batchcard.
- C. Batchcard Coordinator will route for Pilot Plant and EAG approvals (See CARD AUTHORIZATION REQUIREMENTS for PILOT PLANT cards).
- D. Upon obtaining Pilot Plant and EAG approvals, the Batchcard Coordinator will distribute batchcards as follows:
 1. Pilot Plant (with copy of PIP)
 2. Pilot Plant Manager
 3. Originating BFG Chemist
 4. EAG files

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