TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

PURPOSE

The purpose of this procedure is to establish a systematic means of reporting and handling transportation accidents involving major chemical products originating from or commodities consigned to the Chocolate Bayou Plant in Monsanto owned or leased equipment.

POLICY

Notification of transportation accidents involving Monsanto products should be promptly and courteously accepted by any employee of the company. Prime responsibility for handling transportation accidents lies with the carrier. However, when such accidents involve Monsanto Chocolate Bayou products in Monsanto leased or owned equipment, Monsanto will offer assistance to the carrier to accomplish the following objectives:

a. Minimize further injury or loss of life.
b. Minimize unfavorable publicity.
c. Clean-up and salvage.

PLAINTIFF'S EXHIBIT MON-122

SCOPE

This procedure applies to any method of shipment of all products originating from the Chocolate Bayou Plant. The major products that fall within this category are:

	Attachment #		Attachment #
Acetone	1	Isoprene	4
Acrylonitrile	2	LAN	10
Alpha Methyl Styrene	3	Methyl-Acetylene (Propyne)	11
Amino-Plast Resins	35	Naphthalene	18
Aromatic Concentrate Heavy	37	Naphthalene Bottoms	19
Benzene	5	Naphthalene Concentrate	20
Butadiene	6	Pentenes	21
Butene - 2	7	Pheno-Plast Resins	33
Butylenes, mixed	8	Phenol	22
Condensate (incoming feedstock)	9	Phthalic Anhydride	17
C_9 Aromatics	12	Piperylene	39
Dicyclopentadiene (DCPD)	38	Propylene	23
DIPB (diisopropyl benzene)	13	Raffinate	28
Ethane	14	Resin Oil	24
Ethylbenzene	15	Resin PR (aromatic pitch, all grades)	25
Ethylene	16	Resinox P-99	32
		Resinox 596 Varnish	34
		SAB	29

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	Attachment #
Sodium MTA Monohydrate	36
Stripped Oils	30
Toluene	26
Ortho-xylene	31
Xylenes	27

RESPONSIBILITIES

The "receiver" of first notification of the accident shall be responsible for obtaining as much pertinent information as possible concerning the situation, and for immediately notifying the plant manager and a member of Distribution supervision.

This "receiver" of notification could be any employee, but would probably be one of the following:

Shift Foreman
Plant Protection (Guards)
Distribution Dispatcher

After notification by the "receiver", the Plant Manager shall be responsible for all subsequent action taken with regard to the accident.

PROCEDURE

A. When notification is made directly to the Chocolate Bayou Plant, personnel so notified should obtain as much information as possible at the time of the initial call. Appendix A is a check sheet of desirable information and should be utilized by the "receiver" of first notification. It is particularly important that a communication contact be established.

B. The "receiver" of the notification should immediately contact the Distribution Superintendent and pass on all available information concerning the accident.

C. The Distribution Superintendent will notify the Plant Manager who will organize and direct remedial and salvage operations to achieve the objectives as listed under "Policy".

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D. Simultaneously with the organization of help and advice, the plant manager will direct a member of his staff to notify Central Distribution, Public Relations, Safety, Sales, Insurance, Legal and Medical Departments of the accident.

E. For pipeline emergencies refer to "Emergency Procedures and Management Plan, Cross-Country Pipelines", published and distributed by the pipeline manager.

GENERAL

Appendix B describes Standard Precautionary Measures to be taken in the event of an accident. As the bulletins of the various properties and hazards of our major products are completed, they will be added as attachments to this procedure. The information contained herein is to be supplied to a caller only by an individual who is technically qualified to do so, e.g., a Distribution supervisor or Production supervisor.

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MONSANTO COMPANY
TRANSPORTATION ACCIDENT
EMERGENCY CHECK SHEET

NOTE: Get information only. Don't give advice unless authorized by plant manager.

PRODUCT _____

1. Person Calling _____
2. His Position and Company _____
3. Location of Party Calling _____
4. Telephone Number _____
5. Material Emission - Liquid _____ Vapor _____
6. Nature of Emergency _____
7. Extent of Emergency - Fire _____ Explosion _____ Damage _____
8. Physical Location of Emergency _____
   A. Pipeline Right-of-Way Marker No. _____
   B. Is Location Near
      1) RR Line _____ 2) Waterway _____ 3) Highway _____
      4) Homes _____
      5) Well-Travelled Highway _____
      6) Near Open Area (Well Travelled) _____
      7) Near Open Area (Not Well Travelled) _____
      8) Town _____
9. Cause of Emergency _____
10. Name of Carrier If Not Monsanto Owned _____
11. Have local police, state police and fire departments been informed of hazard? _____
12. Are local authorities taking action to keep area clear of people and vehicles? _____
13. Is assistance from Monsanto required? _____
14. Other useful information _____
15. If Monsanto needs further information who can we call?
    Name _____ Phone _____ City _____
    Date of Call _____ Time _____
16. Information Received by (Name) _____
    (Time) _____ (Date) _____
17. Notification:

	Time	Date
Distribution		
Shift Coordinator		
Scheduling		
Safety		

18. Action taken _____

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STANDARD PRECAUTIONARY MEASURES

CAUTION: This information to be provided only by Distribution or Production supervision. Get the name and position of person requesting information before giving advice.

1. If there is leakage

   a. Keep all people away.
   b. Immediately notify local sheriff or state police of potential hazard and request they keep area clear of people and vehicles.
   c. Instruct the police to call Monsanto at 581-2161 from 8:00 A.M. to 4:30 P.M. during the week or 581-2157 at night, weekends, and holidays.
   d. Do not permit unqualified personnel to attempt repairs.
   e. Other instructions will vary depending on conditions, but must be consistent with the maintenance of maximum safety pending arrival of Emergency Team.

2. If contents of container are burning

   a. Protect surrounding area.
   b. Keep all people away.
   c. Immediately notify the police of potential hazard and request they keep area clear of people and vehicles.
   d. Instruct the police to call Monsanto at 581-2161 from 8:00 A.M. to 4:30 P.M. during the week or 581-2157 at night, weekends, and holidays.
   e. Do not permit unqualified personnel to attempt repairs. Other instructions will vary depending on conditions, but must be consistent with the maintenance of maximum safety pending arrival of Emergency Team.

3. If container is damaged but not leaking

   a. If container can be temporarily repaired and moved without hazard, advise caller to proceed.
   b. If major repairs are necessary, container is not to be moved or repaired until Emergency Team arrives on site or Monsanto personnel advise disposition.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Acetone

Shipped by: Tank Car, Tank Truck, Barge

Fire and Explosion Hazard:

1.	Description:	Colorless, water-soluble, flammable liquid, fragrant mint-like odor.
2.	Flashpoint:	0° F
3.	Explosive Range:	2.5 - 12.8% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguisher, water fog.

Health Hazard:

Maximum allowable for prolonged exposure is 1000 ppm in air. Irritating to skin, eyes and nose. Narcotic effect in high concentrations. Air masks in strong concentrations. Workers overcome, remove from area, rest, aid breathing with oxygen. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposure. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Acrylonitrile

Shipped by: Tank Car, Barge

Fire and Explosion Hazard:

1.	Description:	Clear liquid, with a faint pungent odor like that of peach seed kernels.
2.	Flashpoint:	30° F
3.	Explosive range:	3% to 17% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	Water fog, dry chemical, CO_2.

Health Hazard:

Maximum allowable concentration for prolonged (8 hours) breathing exposure is 20 ppm. The liquid and vapors are dangerous to the eyes. Mild exposure causes nausea, vomiting, weakness; occasionally, headache and diarrhea.

Remove to fresh air, notify physician, remove contaminated clothing, wash with large amounts of water, aid breathing with oxygen. Amyl nitrite is antidote. Aspirols of amyl nitrite can be broken and held over the nostrils for 15 to 30 seconds per minute.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: AMS (Alpha Methyl Styrene)

Shipped by: Barge, Tank Car, Tank Truck

Fire and Explosion Hazard:

1.	Description:	Pale yellow flammable liquid shipped as a liquid at atmospheric pressure.
2.	Flashpoint:	136° F
3.	Explosive range:	Unknown
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	Dry chemical or CO_2, fire extinguishers, water fog.

Health Hazard:

Breathing chemical may cause headache or dizziness. Remove to fresh air. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Isoprene

Shipped by: Tank Truck

Fire and Explosion Hazard:

1.	Description:	Colorless, flammable liquid. Shipped as liquid under slight pressure.
2.	Flashpoint:	-65° F
3.	Explosive range:	1.5 - 7.5% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguisher, water fog.

Health Hazard:

Breathing may irritate the nose, throat, and upper respiratory tract. Principal problem is one of breathing - air dilution. Remove to fresh air. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Benzene

Shipped by: Tank Car, Tank Truck, Barge and Pipeline. Refer to "Emergency Procedure and Management Plan, Cross-Country Pipelines".

Fire and Explosion Hazard:

1.	Description:	Colorless, flammable liquid with aromatic odor.
2.	Flashpoint:	12° F
3.	Explosive range:	1.5 - 8% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers, water fog.

Health Hazard:

Maximum allowable for prolonged breathing exposure is 35 ppm in air. Short breathing exposure to heavy concentrations may be fatal. May penetrate skin. May cause dizziness, tightening of leg muscles, and pressure sensation on forehead. Workmen overcome, remove to fresh air, aid breathing with oxygen, summon physician. Air masks in heavy concentration. Avoid skin contact. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.
2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.
3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Butadiene

Shipped by: Tank Car

Fire and Explosion Hazard:

1.	Description:	Colorless, flammable gas with characteristic odor shipped as liquid under pressure.
2.	Flashpoint:	Less than 20° F.
3.	Explosive range:	2.0 - 11.5% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	See "Immediate Action". NOTE: May form explosive peroxides on exposure to air.

Health Hazard:

Maximum allowable for prolonged breathing exposure is 1000 ppm in air. Principal problem is one of breathing-air dilution. High concentration may cause dizziness. Remove to fresh air. When heated emits acrid vapors. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Explosion possible. Remove sources of ignition. Dissipate material with water fog. Stop leak if possible. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment with water fog. DO NOT EXTINGUISH FIRE UNLESS LEAK CAN BE SHUT OFF. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Butene - 2

Shipped by: Tank Car, Tank Truck

Fire and Explosion Hazard:

1.	Description:	Colorless, flammable gas shipped as liquid under pressure.
2.	Flashpoint:	Less than 20° F.
3.	Explosive range:	Estimate 2 - 9% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	See "Immediate Action".

Health Hazard:

High concentration may cause dizziness primarily due to air dilution. Remove to fresh air.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Explosion possible. Remove sources of ignition. Dissipate material with water fog. Stop leak if possible. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment with water fog. DO NOT EXTINGUISH FIRE UNLESS LEAK CAN BE SHUT OFF. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Butylenes, Mixed (C_4's)

Shipped by: Tank Car, Tank Truck

Fire and Explosion Hazard:

1.	Description:	Colorless flammable gas shipped as liquid under pressure.
2.	Flashpoint:	Less than 20° F.
3.	Explosive range:	Estimate 2 - 9% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	See "Immediate Action".

Health Hazard:

High concentration may cause anesthetic effects and may cause dizziness. Remove to fresh air.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Explosion possible. Remove sources of ignition. Dissipate material with water fog. Stop leak if possible. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment with water fog. DO NOT EXTINGUISH FIRE UNLESS LEAK CAN BE SHUT OFF. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Condensate (also known generally as light crude oil or distillate. Known also in Monsanto as SNIFO or SNIFON).

Shipped by: Barge

Fire and Explosion Hazard:

1.	Description:	Light amber, flammable liquid.
2.	Flashpoint:	30 - 50° F.
3.	Explosive:	Yes
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 and dry chemical extinguishers; water and fog.

Health Hazard:

Breathing heavy concentrations may cause headache, dizziness. Remove to fresh air. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: L.A.N. (Light Aromatic Naptha)

Shipped by: Tank Truck

Fire and Explosion Hazard:

1.	Description:	Colorless flammable liquid shipped as a liquid at atmospheric pressure.
2.	Flashpoint	260° F
3.	Explosive range:	Unknown
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	Dry chemical or CO_2 fire extinguisher, water fog.

Health Hazard:

Breathing chemical may cause headache or dizziness.
Remove to fresh air.
Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Methyl Acetylene (Propyne)

Shipped by: Tank Car, Tank Truck

Fire and Explosion Hazard:

1. Description: Colorless flammable gas shipped as a liquid under pressure.
2. Explosive range: 2.4 - 11.7% by volume in air.
3. Precuations: No smoking or open lights.
4. Extinguished by: See "Immediate Action".

Health Hazard:

Maximum allowable concentration for prolonged breathing expose is 1000 ppm by volume in air. Has a slight anesthetic effect. Principal problem is one of breathing - air dilution. Remove to fresh air. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Explosion possible. Remove sources of ignition. Dissipate material with water fog. Stop leak if possible. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting equipment with water fog. DO NOT EXTINGUISH FIRE UNLESS LEAK CAN BE SHUT OFF. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: C_9 Aromatics (heavy aromatics)

Shipped by: Tank Truck

Fire and Explosion Hazard:

1.	Description:	Straw colored, flammable liquid with solvent odor.
2.	Flashpoint:	110 - 115° F.
3.	Explosive:	Yes, at moderate temperatures.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguisher, water fog.

Health Hazard:

Breathing considerable quantities may cause headache, dizziness. Remove to fresh air. Avoid skin contact. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: DIPB (diisopropyl benzene)

Shipped by: Tank Cars and Tank Trucks

Fire and Explosion Hazard:

1.	Description:	Clear, colorless, flammable liquid.
2.	Flashpoint:	170° F
3.	Explosive:	Yes, at moderate temperatures.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers, water fog.

Health Hazard:

Low vapor pressure reduces breathing hazard. Breathing heated vapors may cause headache and dizziness. Remove to fresh air. Prolonged skin contact may irritate.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Ethane

Shipped by: Pipeline. Refer to "Emergency Procedure and Management Plan, Cross-Country Pipelines".

Fire and Explosion Hazard:

1. Description: Colorless, odorless, flammable gas.
2. Explosive range: 3.3 - 10.6% by volume in air.
3. Precautions: No smoking or open lights.
4. Extinguished by: See "Immediate Action".

Health Hazard:

High concentrations have an anesthetic effect. Does not give warning - no odor. May cause headache and drowsiness. Remove to fresh air and aid breathing with oxygen.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Explosion possible. Remove sources of ignition. Dissipate material with water fog. Stop leak if possible. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment with water fog. DO NOT EXTINGUISH FIRE UNLESS LEAK CAN BE SHUT OFF. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Ethylbenzene (EB)

Shipped by: Tank Car, Tank Truck, Barge and Pipeline. Refer to "Emergency Procedure and Management Plan, Cross-Country Pipelines".

Fire and Explosion Hazard:

1.	Description:	Colorless, flammable liquid with aromatic odor.
2.	Flashpoint:	85° F
3.	Explosive range:	1 - 6% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers, water fog.

Health Hazard:

Maximum allowable for prolonged breathing exposure is 200 ppm in air. Dangerous to eyes and irritating to upper respiratory passages. May produce headache, vomiting. Remove to fresh air, aid breathing with oxygen. Notify physician. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Ethylene

Shipped by: Pipeline. Refer to "Emergency Procedure and Management Plan, Cross-Country Pipelines".

Fire and Explosion Hazard:

1.	Description:	Colorless, flammable gas with suffocating, ethereal odor.
2.	Explosive range:	3.0 - 34.0% by volume in air.
3.	Precautions:	No smoking or open lights.
4.	Extinguished by:	See "Immediate Action".

Health Hazard:

Maximum allowable for prolonged breathing exposure is 5500 ppm by volume in air. May cause anesthetic effects. Relatively non-hazardous to health.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Explosion possible. Remove sources of ignition. Dissipate material with water fog. Stop leak if possible. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment with water fog. DO NOT EXTINGUISH FIRE UNLESS LEAK CAN BE SHUT OFF. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Phthalic Anhydride

Shipped by: Tank Car, Tank Truck

Fire and Explosion Hazard:

1.	Description:	Shipped as a colorless liquid or white solid.
2.	Flashpoint:	329° F
3.	Explosive range:	1.7 - 10.4% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers, water fog.

Health Hazard:

Breathing will cause irritation of the nose, throat, and upper respiratory tract. Avoid skin contact. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

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TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Naphthalene

Shipped by: Tank Car

Fire and Explosion Hazard:

1.	Description:	White, crystalline, volatile flakes with mothball odor.
2.	Flashpoint:	176° F (melting point 177° F).
3.	Explosive range:	0.9 - 5.9% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 and dry chemical extinguishers; water fog.

Health Hazard:

Breathing considerable quantities may cause headache, nausea. Remove to fresh air.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17194

B001746

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Naphthalene Bottoms

Shipped by: Tank Car, Tank Truck

Fire and Explosion Hazard:

1.	Description:	Reddish-brown, sticky, semi-solid with mothball odor.
2.	Flashpoint:	Above 300° F.
3.	Explosive:	Yes, at high temperatures.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 and dry chemical extinguishers; water fog.

Health Hazard:

Breathing may irritate nose, throat, and in considerable quantities, may cause headache and dizziness. Remove to fresh air. Avoid skin contact. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Ioslate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17195

B001747

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Naphthalene Concentrate

Shipped by: Tank Car, Tank Truck

Fire and Explosion Hazard:

1.	Description:	Yellow-green to black, flammable liquid with slight mothball odor.
2.	Flashpoint:	Estimate 200° F.
3.	Explosive:	Yes, at high temperature.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguisher; water fog.

Health Hazard:

Breathing may irritate nose, throat, and in considerable quantities may cause headache and dizziness. Remove to fresh air. Avoid skin contact. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17196

B001748

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Pentenes (C_5's)

Shipped by: Tank Car, Tank Truck

Fire and Explosion Hazard:

1.	Description:	Colorless, flammable liquid with gasoline type odor.
2.	Flashpoint:	Less than 0° F.
3.	Explosive range:	Estimated 2 - 8% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers, water fog.

Health Hazard:

Vapors may irritate nose, throat. High concentration may cause headache, dizziness. Remove to fresh air.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17197

B001749

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Phenol (carbolic acid)

Shipped by: Tank Car, Tank Truck and Barge

Fire and Explosive Hazard:

1.	Description:	White crystalline organic material. Sweetish aromatic odor.
2.	Flashpoint:	175° F (melts at 104° to 105.8° F). Solid phenol burns with difficulty and gives off heavy smoke. The liquid is readily combustible.
3.	Explosive:	Yes, at high temperature.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguisher, water fog.

Health Hazard:

Maximum allowable concentration 5 ppm by volume in air. Highly toxic and dangerous when handled incorrectly. Exerts a local corrosion effect and is readily absorbed through the skin and mucous membranes, through the gastrointestinal tract, or through the lungs. After absorption of phenol, the toxic effects are exerted primarily on the central nervous system, but following sufficient exposure there may be also damage to the lungs, kidneys, liver, pancreas, and spleen. Exposure to fatal amounts usually results in death within a few hours.

A serious burn may result unless phenol is removed promptly and thoroughly. In case of failure to wash the phenol completely from all contaminated skin areas, in the very minimum of time and if a large portion of the body surface is involved, death may result very quickly. Patient should be removed immediately from the toxic vapor or mist to fresh air or an uncontaminated atmosphere. A physician should be called immediately.

6113
17198

B001750

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17199

B001751

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Propylene

Shipped by: Tank Car, Tank Truck, and Pipeline. Refer to "Emergency Procedure and Management Plant, Cross-Country Pipelines".

Fire and Explosion Hazard:

1. Description: Colorless, odorless, flammable gas.
2. Explosive: 2.0 - 11.1% by volume in air.
3. Precautions: No smoking or open lights.
4. Extinguished by: See "Immediate Action".

Health Hazard:

Maximum allowable for prolonged breathing exposure is 400 ppm by volume in air. In high concentrations, is anesthetic. Headache, dizziness may develop. Remove to fresh air.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Explosion possible. Remove sources of ignition. Dissipate material with water fog. Stop leak if possible. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment with water fog. DO NOT EXTINGUISH FIRE UNLESS LEAK CAN BE SHUT OFF. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17200

B001752

TRANSPORTATION ACCIDENTS INVOVLING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Resin Oil

Shipped by: Tank Cars and Tank Trucks

Fire and Explosion Hazard:

1.	Description:	Yellow-to-black, flammable liquid with aromatic odor.
2.	Flashpoint:	120° F.
3.	Explosive:	Yes, at moderate temperatures.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers; water fog.

Health Hazard:

Breathing heavy concentrations may cause sore throat, headache, nausea. Remove to fresh air. Considerable skin contact may cause irritation. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire- Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17201

B001753

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Resin PR (aromatic pitch, tar, all grades)

Shipped by: Tank Car, Tank Truck and Barge

Fire and Explosion Hazard:

1.	Description:	Black tar with aromatic odor. Melts above 100° F.
2.	Flashpoint:	275 - 300° F.
3.	Explosive:	Yes, at high temperatures.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers; water fog.

Health Hazard:

Do not breathe hot vapors. Low vapor pressure at room temperature reduces breathing hazard. If overcome with hot vapors, remove to fresh air, aid breathing, and notify physician. Avoid skin contact of cold or hot material.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17202

B001754

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Toluene

Shipped by: Tank Car, Tank Truck and Barge

Fire and Explosion Hazard:

1.	Description:	Colorless, flammable liquid, benzene like odor.
2.	Flashpoint:	40° F.
3.	Explosive range:	1.25 - 7.0% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Fire extinguished by:	CO_2 or dry chemical extinguishers; water fog.

Health Hazard:

Maximum allowable concentration of toluene 200 ppm in air. Absorbed through mouth, nose and skin. Narcotic effect. Workman overcome to be removed from area and rested. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17203

B001755

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Xylenes

Shipped by: Tank Truck, Barge

Fire and Explosion Hazard:

1.	Description:	Water-white liquid with an aromatic odor, flammable.
2.	Flashpoint:	80.6° F.
3.	Explosive range:	1 - 6% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers, water fog.

Health Hazard:

Maximum allowable concentration of xylene for prolonged exposure is 200 ppm in air. Irritating to the skin and eyes and nervous system. Workers overcome, remove from area, aid breathing with oxygen. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17204

B001756

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Raffinate

Shipped by: Barge

Fire and Explosion Hazard:

1.	Description:	Colorless flammable liquid shipped as a liquid at atmospheric pressure.
2.	Flashpoint:	Less than 40° F.
3.	Explosive range:	1.3 to 8.0% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	Dry chemical, CO_2, water fog.

Health Hazard:

Breathing chemical may cause headache or dizziness. Remove to fresh air. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17205

B001757

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: SAB

Shipped by: Tank Car, Barge

Fire and Explosive Hazard:

1.	Description:	Light amber liquid shipped at atmospheric pressure.
2.	Flashpoint	310° F,
3.	Explosive range:	Not known.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguisher, water fog.

Health Hazard:

Non-toxic material. However, splashes should be flushed with water. May cause headaches or dizziness. Remove to fresh air.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposure with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17206

B001758

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Ortho-xylene

Shipped by: Barge, Tank Truck, Tank Car

Fire and Explosion Hazard:

1.	Description:	Colorless flammable liquid shipped as a liquid at atmospheric pressure.
2.	Flashpoint:	63° F
3.	Explosive range:	1.0 - 6.0% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	Dry chemical or CO_2 fire extinguishers, water fog.

Health Hazard:

Maximum allowable concentration is 200 ppm. Has a strong narcotic action. Remove to fresh air. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17207

B001759

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Resinox P-99

Shipped by: Tank Truck and Drums

Fire and Explosion Hazard:

1.	Description:	Clear colorless liquid with sweetish aromatic odor.
2.	Flashpoint:	205° F (COC).
3.	Explosive:	Yes, at high temperature.
4.	Precautions:	No smoking or open light.
5.	Extinguished by:	CO_2 or dry chemical extinguisher, water fog.

Health Hazard:

Contains 50% phenol and 18% formaldehyde. Phenol has a maximum allowable concentration 5 ppm by volume in air. Highly toxic and dangerous when handled incorrectly. Exerts a local corrosion effect and is readily absorbed through the skin and mucous membranes, through the gastrointestinal tract, or through the lungs. After absorption of phenol, the toxic effects are exerted primarily on the central nervous system, but following sufficient exposure there may be also damage to the lungs, kidneys, liver, pancreas, and spleen. Exposure to fatal amounts usually results in death within a few hours.

A serious burn may result unless phenol is removed promptly and thoroughly. In case of failure to wash the phenol completely from all contaminated skin areas, in the very minimum of time and if a large portion of the body surface is involved, death may result very quickly. Patient should be removed immediately from the toxic vapor or mist to fresh air or an uncontaminated atmosphere. A physician should be called immediately.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

6113
17208
B001760

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE
TRANSPORTATION ACCIDENTS

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17209

B001761

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Pheno-Plast Resins (PF 541, PF 543, PF 544, PF 545, PF 546, PF 563, Resinox 514-3).

Shipped by: Tank Car and Tank Truck

Fire and Explosion Hazard:

1. Description: Reddish to brown liquid with a formaldehyde odor.
2. Flashpoint: Greater than 180° F.
3. Explosion: No danger

Health Hazard:

Contains free phenol and formaldehyde. Highly toxic and dangerous when handled incorrectly. Phenol in the resins exerts a local corrosion effect and is readily absorbed through the skin and mucous membranes, through the gastrointestinal tract, or through the lungs. After absorption of phenol, the toxic effects are exerted primarily on the central nervous system, but following sufficient exposure, there may be also damage to the lungs, kidneys, liver, pancreas, and spleen. Remove to fresh air. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.
2. Container leaking - Isolate area. Repair or take necessary steps as situation warrants. Special assistance furnished by Monsanto if desired.
3. Container Exposed to Fire - Isolate area. Contain the fire, cooling equipment, protecting exposures with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17210

B001762

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Resinox 596 Varnish

Shipped by: Tank Car, Tank Truck, and Drums

Fire and Explosion Hazard:

1.	Description:	Heavy amber colored liquid with formaldehyde odor.
2.	Flashpoint:	Greater than 80° F.
3.	Explosive:	At moderate temperature.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers; water fog.

Health Hazard:

Breathing heavy concentrations may cause sore throat, headache, nausea. Remove to fresh air. Considerable skin contact may cause irritation. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, colling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17211

B001763

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE
TRANSPORTATION ACCIDENTS

Product: Amino-Plast Resins (Resimene 860, 841, 842; Scripset 101; Urea Formaldehyde 113, UFE 2097, UFH 299, UFG 17-86, UFG 17-52, UFG 17-67, UFG 17-57, UFG 5-95, UFG 5-93).

Shipped by: Tank Trucks

Fire and Explosion Hazard:

1. Description: Water white liquid with formaldehyde odor.
2. Flashpoint: Greater than 180° F.
3. Explosion: No danger.

Health Hazard:

Prolonged skin contact may cause irritation. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.
2. Container leaking - Isolate area. Repair or take necessary steps as situation warrants. Special assistance furnished by Monsanto if desired.
3. Container Exposed to Fire - Isolate area. Contain the fire, cooling equipment, protecting exposures with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17212

L001764

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Sodium MTA Monohydrate

Shipped by: Tank Car

Fire and Explosion Hazard:

1.	Description:	White crystalline powder with aminoacetate odor.
2.	Explosive:	Yes, at a minimum dust concentration of two ounces per cubic foot with a spark of 160 joules.
3.	Precautions:	No smoking or open lights.
4.	Combustion:	Not flammable.

Health Hazard:

Dust will irritate skin and eyes. Remove to fresh air. Flush irritated area with water.

Immediate Action:

1. Container not leaking - Repair or take necessary steps as situation warrants.

2. Container leaking - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17213

B001765

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Heavy Aromatic Concentrate (H.A.C.)

Shipped by: Tank Cars and Tank Trucks

Fire and Explosion Hazard:

1.	Description:	Yellow-to-black, flammable liquid aromatic odor.
2.	Flashpoint:	120° F.
3.	Explosive:	Yes, at moderate temperatures.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers; water fog.

Health Hazard:

Breathing heavy concentrations may cause sore throat, headache, nausea. Remove to fresh air. Considerable skin contact may cause irritation. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17214
B001766

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Dicyclopentadiene (DCPD)

Shipped by: Tank Car and Barge

Fire and Explosion Hazard:

1.	Description:	Clear liquid.
2.	Flashpoint:	90° F.
3.	Explosive:	Yes, at moderate temperatures.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguishers; water fog.

Health Hazard:

Breathing heavy concentrations may cause sore throat, headache, nausea. Remove to fresh air. Considerable skin contact may cause irritation. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17215

1767

TRANSPORTATION ACCIDENTS INVOLVING CHOCOLATE BAYOU PRODUCTS

EMERGENCY HANDLING PROCEDURE TRANSPORTATION ACCIDENTS

Product: Piperylene

Shipped by: Tank Truck

Fire and Explosion Hazard:

1.	Description:	Colorless, flammable liquid. Shipped as a liquid under slight pressure.
2.	Flashpoint:	- 56° F.
3.	Explosive range:	1.5 - 7.5% by volume in air.
4.	Precautions:	No smoking or open lights.
5.	Extinguished by:	CO_2 or dry chemical extinguisher, water fog.

Health Hazards:

Breathing may irritate the nose, throat, and upper respiratory tract. Principal problem is one of breathing - air dilution. Remove to fresh air. Flush body splashes with water.

Immediate Action:

1. Container not leaking - Isolate area. Repair or take necessary steps as situation warrants.

2. Container leaking, not burning - Isolate area. Remove sources of ignition. Special assistance furnished by Monsanto if desired.

3. Container burning or exposed to fire - Isolate area. Contain the fire, cooling equipment, protecting exposures with water fog. Rupture of container is possible. Monsanto to furnish assistance if desired.

Carrier Requesting Assistance:

Transfer request to plant manager.

6113
17216

B001768

GENERAL LABORATORY SAFETY

PURPOSE

To describe general safety practices to follow while performing laboratory tests.

SCOPE

This procedure applies to all departments which have laboratories in which chemical or physical analyses are performed. This procedure in no way can cover all the hazards associated with laboratory operations and is not to be taken in this light.

RESPONSIBILITIES

Each owning department which has a laboratory is responsible for seeing that proper laboratory safety practices are followed. The larger more complex laboratories should issue more detailed safety manuals or procedures for their specific operation. The Control Laboratory has a detailed Safety Manual which may be used as a reference or guide.

PROCEDURE

A. Glassware

1. All glassware used must be free of flaws, cracks, and broken edges.
2. In some cases glassware that has a broken or has a sharp edge can be rendered safe through fire polishing.
3. Glassware which is unsafe or cannot be made safe, as in 2 above, must be discarded. It should be disposed of in a container for glass only and not in a waste basket, in order to prevent those emptying waste baskets being cut.
4. Never try to catch falling glassware. This is an excellent way to receive a severe cut. Let it fall.
5. Never force glass items when assembling any apparatus containing glass. When inserting glass tubing into a stopper, fire polish both ends of the tubing and lubricate the tube with water, grease, or glycerine. Protect hands with towel or leather glove during insertion.
6. When handling large glass equipment, hold it with two hands to prevent a strain on any part of the equipment and resulting breakage.
7. Do not apply pressure to glass containers. Glass is not a pressure vessel.
8. Do not use undue force when trying to free "frozen" glassware. Throw it away.
9. An open flame should not be applied directly to glassware when heating liquids. Use a screen to disperse the heat. Distillations are about the only exceptions to this.

GENERAL LABORATORY SAFETY

10. When glassware is under a vacuum a plastic safety shield must be placed between you and glassware.
11. Use caution when stirring a material in glassware so as not to break the container.

B. Thermal Burns

1. Thermal burns can be caused by either hot or cold. Both are equally painful.
2. Many tests are performed at extreme temperatures. Care must be taken to provide and use adequate protective equipment in such cases.
3. The temperature of glassware cannot be determined visually so if in doubt wear or use protective equipment when handling.

C. Chemical Burns and Hazards

1. Written test procedures must provide adequate information to those performing tests to allow proper protection in order to reduce chemical burns or other hazards associated with either the test or chemicals being used.
2. All containers of chemicals must be properly and clearly labeled so proper precautions can be taken when handling or using.

D. Flammable Hazards

1. Flammable solvents should be stored in metal containers, not glass. They should not be stored above chest level.
2. Flammable wastes must be disposed of in containers having a flame retarding screen and must be properly grounded.
3. All containers of 5 gallons or more, used for dispersing flammable materials, must have a self-closing faucet containing a flame retarding screen. Large drums when used for dispensing, must also contain a safety vent bung placed in the small bung opening. All such containers must be properly grounded.
4. Glass containers containing flammables, or other hazardous materials, stored on shelves should have a protective lip on the shelf to prevent them from falling off.

E. Spills

1. All spills must be cleaned up immediately.
2. When cleaning up a spill, the proper protective equipment must be worn. This will be determined by the nature of the spill.

   a. Organics - wear rubber gloves. Clean up spill with either cloth or paper towels. Rinse towels thoroughly with water before discarding in order to prevent spontaneous combustion. Then dispose

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of in an oily rag container. Use water to rinse the spill area.

b. Acids - wear rubber gloves. Neutralize the acid with soda ash. Then dilute with water and clean up as in a above.

c. Caustics - Caustics will make the spill area very slippery. Wear rubber gloves. Neutralize the spill with diluted acetic acid. Then dilute with water and clean up as in 'a' above.

3. Mercury Spills - Mercury spills must be cleaned up immediately. Mercury may be cleaned up with suction or using a mercury collector available from lab supply houses. Zinc dust or flowers of sulfur should be sprinkled over the spill area to further remove the mercury.

Note: Special respiratory equipment may be required when cleaning up some spills. Consult Safety or Industrial Hygiene for instructions.

F. Toxicity Hazards

No attempt will be made to list the toxicity of all chemicals handled in laboratories. In general, the ingestion of any chemical reagent, solvent, raw material, or plant product should be considered dangerous and must be avoided. Contact to skin, eyes, or breathing passages whether the material is solid, liquid or vapor must also be avoided. Each laboratory shall maintain a list of hazardous chemicals handled showing toxicity, flammability, and other special hazards.

G. Electrical Hazards

1. Because many tests performed in laboratories use both electrically operated equipment and liquids simultaneously, extreme care must be taken to avoid spillage of water or flammable solvents on the electrical equipment. Either a shock or fire could result.
2. Equipment should be checked before each use. Defective electrical equipment should never be used.
3. All electrical equipment must be grounded.
4. An electrical check for ground continuity should be made on a periodic basis.

H. Compressed Gasses

See SP-025 for correct handling, etc. of cylinders.

I. Personal Protection

1. Eye protection must always be worn at all times whether performing a test or not in a laboratory. If more than safety glasses are required the specific requirements should be stated in the procedure being followed.

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2. Other protective equipment, e.g., face shield, rubber apron, respirators, etc., may also be required for some tests. These needs will be spelled out for the particular test procedure.

J. General

1. When dumping chemicals into a sink, flush the sink before and after with copious amounts of water. Do not dump substances that are not soluble in water into sinks. Do not dump large quantities, 50 ml. or more, of strong acids or bases into sinks.
2. All chemical reagents must be clearly labeled.
3. Do not store chemicals in direct sunlight or near sources of heat.
4. Strong acids or caustics in 5 pint or larger bottles should only be transported from one area to another in a rubber carrying case.
5. Never pipet by mouth. Use a rubber bulb.
6. Eating or drinking will not be done in the work area of a laboratory.
7. Good housekeeping and personal hygiene is an integral part of proper laboratory safety.
8. Know the location and how to use the safety shower, eye bath, and fire extinguisher.
9. Hoods are required for some analyses, as specified in the particular procedure. For hood testing requirements, see procedure SP-032.

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