A Guide to Accumulation and Shipment of

WASTE ASKAREL FLUIDS

SAFE HANDLING OF ASKAREL FLUIDS

Improperly handled, Askarel fluids could be harmful to you and to your environment. Because of this, the following statement appears on all containers of Askarel fluid shipped by Monsanto. Please read this statement carefully:

(old) "Askarel fluids contain Polychlorinated Biphenyls (PCBs). Care should be taken to prevent entry into the environment through spills, leakage, use, vaporization, or disposal of liquid or containers. Avoid prolonged breathing of vapors or mists. Avoid contact with eyes or prolonged contact with skin. If skin contact occurs, remove by washing with soap and water. Following eye contact, flush with water. In case of spillage onto clothing, the clothing should be removed as soon as practical, skin washed, and clothing laundered."

ACCUMULATION OF WASTE FLUIDS

Each time a fluid is transferred there is chance some will be spilled. Therefore, accumulate waste fluids in the same drums you will use for shipping to reduce this hazard.

DRUMS TO USE

55-gallon drums: Must be 18-gauge steel or heavier and have a 2-bung head.

5-gallon drums: Must be 24-gauge steel or heavier.

(Drums must meet DOT 17-E specifications)

cont.

DO NOT USE

Old drums
Rusted drums
Corroded drums
Damaged drums
Drums with weak walls or seams

LABEL DRUMS

Drums should be labeled "WASTE ASKAREL FLUIDS" and with the above "Safe Handling" statement or its equivalent.

FILLING DRUMS

Liquid Waste Only

Keep all solid materials out of drums used for waste Askarel liquid. Solid materials (sludge, rags, paper, sawdust, metal parts, floor sweeping chemicals, etc.) must be accumulated and disposed of separately. Contact your environmental department for proper disposal methods for solid materials.

Keep Water Out of Drums

Waste Askarel fluids shipped to Monsanto for incineration must not contain more than 1% water, or damage to the incinerator can result.

Do Not Overfill Drums

Airspace is needed to allow for possible thermal expansion of the fluid:

Minimum airspace: 55-gallon drums - 1-½ - 2 inches
5-gallon drums - 1 inch

Failure to leave sufficient airspace can result in possible fluid leakage or seam failure due to pressures caused by fluid expansion.

cont.

Seal the Drums

Use a proper bung. Inspect the bung and the drum opening to insure tight, leak-proof seal.

Do not use damaged bungs, rags, pieces of wood, or other inappropriate materials to seal drums.

MOVING FILLED DRUMS

Use Proper Drum-Handling Equipment

Askarel-filled drums should be moved only with a proper drum-grabbing device. A parrot beak type of drum-grabbing device will reduce the possibility of damage to drums. A common drum handling device of this type is the Lift-O-Matic*, manufactured by Marvel Industries.

Pallets Not Recommended

Askarel-filled drums should not be palletized. However, if proper drum-handling equipment is not available and pallets must be used:

- Be sure pallets are properly constructed and undamaged to reduce the chance of the drum falling from the pallet when being moved.
- Steel-band all drums to their pallets.

  Drums should be banded together horizontally as well as vertically to the pallet.
- So that four drums can be loaded across the width of a truck to prevent shifting in transit, multiple (2 or 4) drum pallets should be no more than 46 inches wide.

STORING FILLED DRUMS PRIOR TO SHIPMENT

If Askarel-filled drums must be stored prior to return to Monsanto:

Inspect Drums for Leakage

Inspect drums for leakage around seams and bung, making sure all

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seals are tight and leakproof.

Clean Up Spillage

Clean the outside of the drum of any spilled fluids, following approved cleaning methods. Properly dispose of materials and any water used to clean drums.

Store In Protected Area

Drums should be stored in an enclosed area where they will be protected from possible damage and inclement weather.

In Exposed Areas Store On Sides

If drums must be stored in an exposed area, store drums on their sides with both bungs below the fluid level so that rain water will not accumulate on the top of the drums. Otherwise, as drums "breathe", water can be drawn into the drum through the bung seal. Use blocks or other device to keep drums stationary.

Do Not Stack

Do not stack drums, whether stored on their sides or on end.

BEFORE SHIPMENT

Following this procedure For EACH Shipment to Monsanto:

1. Contact: Customer Services Supervisor
   Attention: Mr. C. R. Field
   Monsanto Company
   800 N. Lindbergh Boulevard
   St. Louis, Missouri 63166

   (314) 694-3024

   Give the following information:
   - Number of drums in the shipment
   - Name and address of person to receive drum labels
   - Purchase order number, if a specific number is to be used
   - Anything out of the ordinary about the fluid or the shipment

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You will then receive:

- Letter of authorization with Monsanto identification number for the shipment
- Pre-addressed shipment/warning labels for each drum
- Carrier's Advisory Note to be attached to the bill of lading
- Terms of shipment and charges, if any

Upon receipt of above materials:

2. Fill in EACH label with Monsanto identification number, product description and YOUR company name and telephone number.

3. Label EACH drum.

4. Put Monsanto identification number and your telephone number on Carrier's Advisory Note and attach to bill of lading.

LOADING AND SHIPMENT

- Perform a final check for leakage, damage, and to assure bungs are tightly sealed.

- Load and secure drums to prevent shifting in transit.

- If shipment is to be part of a mixed consignment, waste Askarel fluids are not to be shipped as mixed loads with raw materials for animal feed, food grade chemicals, foods, food packaging materials, or pharmaceuticals. Contamination of such goods may subject them to embargo or destruction.

- Be certain driver is aware of Carrier's Advisory Note and telephone numbers in case of leakage or other problems.

- Do not ship via piggyback.

Please note: Monsanto checks all shipments upon arrival. Failure to follow the above guidelines could result in fluids being returned to you and additional charges assessed.

The above instructions are intended only as a shorthand guide. For complete instructions refer to the ANSI CI07 document, "Guidelines for Handling and Disposal of Capacitor and Transformer Grade Askarels, Containing

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Polychlorinated Biphenyls", available from the American National Standards Institute, 1430 Broadway, New York, New York 10018.

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