THE PROPER HANDLING OF ARCOLORS AND THEIR MIXTURES IN THE ELECTRICAL INDUSTRY

Monsanto Chemical Co.
Organic Div. Sales Dept.
800 N. Delmar Blvd.
St. Louis, Mo.

P. G. Benignus
12/1/54



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Attachments:
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Drawing No. 9C-8170-5, The Horizontal Storage Tank.
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Drawing No. 9C-8248, The Breather.
Drawing No. 9C-8278, The Varec Gauge.
Drawing No. 9C-8178, The Unloading Platform.

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SERVING INDUSTRY · WHICH SERVES MANKIND ·

MONSANTO

Aroclor 1254

(Aroclor Reg. U. S. Pat. Off.)

CAUTION! AVOID PROLONGED AND REPEATED CONTACT WITH SKIN.

AVOID PROLONGED BREATHING OF VAPOR AND DUST.

MANUFACTURED BY MONSANTO CHEMICAL COMPANY • ST. LOUIS 4, MO.

MO-280—7-56—53

SENT BY:

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CAUTION! CONTAINS CHLORINATED HYDROCARBONS

- 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.
- If clothing becomes soaked with fluid, launder before wearing again.

Caution! Contains chlorinated hydrocarbons

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.
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CHAPTER 9

DERMATOLOGY AND TOXICOLOGY

Skin patch tests using Aroclor 1254 (biphenyl Chlorinated to the extent of 54% by weight) applied to gauze and placed in contact with the skin showed no primary irritancy or sensitization. The tests were conducted under competent medical supervision and the standard procedure recommended by Drs. Louis Schwartz and Samuel M. Peck, Reprint No. 2552, Public Health Reports, Vol. 59, No. 19 (April 28, 1944) was used.

If Aroclors are spilled on the skin, the skin should be washed in the usual manner with soap solutions. If accidental burns occur from contact with hot Aroclors, the burn should be treated the same as any ordinary burn. Aroclor adhering to the burned area need not be removed immediately unless treatment of the burn demands it, in which case use soap and water or repeated washings with a vegetable oil.

At ordinary temperatures Aroclors have not presented industrial toxicological problems.

If Aroclors are used at elevated temperatures in open systems, methods must be designed to exhaust any vapors arising. Experimental work on animals indicates that the maximum safe concentrations of vapors in workrooms is in the range of 0.5 to 1.0 milligram per cubic meter of air. This applies to all of the liquid Aroclors.

Laboratory technique merely requires keeping the hands

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free of the liquid and handling it under a well ventilated hood.

Localized or spot ventilation together with general workroom exhaust is recommended for plant operations.

When sampling tank cars, canvas gloves and safety glasses or goggles should be worn. No special clothing is required, but the worker's garments should be laundered at least weekly and changed in case Aroclor or Aroclor mixtures is spilled on the clothes accidentally.

If workmen are exposed to Aroclor vapors at relatively high levels, as may be the case when opening a heated capacitor impregnating chamber, a respirator should be worn during these short intervals.

The many years of satisfactory and safe use of Aroclors and their mixtures with chlorinated benzenes in the electrical industry for impregnating capacitors and filling transformers has demonstrated the industry's ability to handle these fluids without hazard to the workmen. It is a simple matter and in line with good "housekeeping" and personal cleanliness to exercize the suggested and required precautions in all cases.

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THE PROPER HANDLING OF AROCLORS AND THEIR MIXTURES IN THE ELECTRICAL INDUSTRY



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ADM 001266

P. G. BENIGNUS

MAY 1, 1956

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CHAPTER 9

DERMATOLOGY AND TOXICOLOGY

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At ordinary temperatures Aroclors have not presented industrial toxicological problems.

If Aroclors are used at elevated temperatures in open systems, methods must be designed to exhaust any vapors arising. Experimental work on animals indicates that the maximum safe concentrations of vapors in workrooms is in the range of 1.0 to 2.0 milligram per cubic meter of air. This applies to all of the liquid Aroclors.

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Laboratory technique merely requires keeping the hands free of the liquid and handling it under a well ventilated hood.

Localized or spot ventilation together with general workroom exhaust is recommended for plant operations.

When sampling tankcars, canvas gloves and safety glasses or goggles should be worn. No special clothing is required but the worker's garments should be laundered at least weekly and changed in case Aroclor or Aroclor mixture is spilled on the clothes accidentally.

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