

## OSHA Directives

### STD 1-5.14A - U.S. Department of Transportation (DOT) Exemption Which Allow Shipment of Combustible and Flammable Liquids in Polyethylene

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- **Record Type:** Instruction
  - **Directive Number:** STD 1-5.14A
  - **Standard Number:** 1910.106(d)(2)(i)
  - **Subject:** U.S. Department of Transportation (DOT) Exemption Which Allow Shipment of Combustible and Flammable Liquids in Polyethylene
  - **Information Date:** 10/24/1980
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SUBJECT: U.S. Department of Transportation (DOT) Exemptions Which Allow Shipment of Combustible and Flammable Liquids in Polyethylene Containers--Reference: 29 CFR 1910.106(d)(2)(i)

A. Purpose. This instruction permits the use of DOT specification, nonspecification polyethylene, and nonregulated containers for storing COMBUSTIBLE and/or FLAMMABLE liquids at inside storage areas under certain conditions.

B. Scope. This instruction applies OSHA-wide.

C. Cancellation. OSHA Instruction STD 1-5.14, April 20, 1979, is canceled.

D. Action OSHA Regional Administrators/Area Directors shall take action permitting the use of polyethylene containers for combustible and flammable liquids in accordance with referenced DOT exemptions and guidelines, as set forth in F of this instruction.

E. Federal Program Change. This instruction describes a Federal program change which affects State programs. Each Regional Administrator shall:

1. Ensure that this change is forwarded to each State designee.
2. Explain the technical content of the change to the State designee as requested.
3. Ensure that State designees are asked to acknowledge receipt of the Federal programs change in writing, within 30 days of notification, to the Regional Administrator. This acknowledgment

should include a description either of the State's plan to implement the change or of the reason why the change should not apply to that State.

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4. Review policies, instructions and guidelines issued by the State to determine that this change has been communicated to State program personnel. Routine monitoring activities (accompanied inspections and case file reviews) shall also be used to determine if this change has been implemented in actual performance.

F. Guidelines. This instruction is based upon the need to resolve the inconsistencies presently found involving the DOT exemptions which permit the shipping of certain liquids in plastic containers. Under 29 CFR 1910.106 OSHA prohibits the use of DOT nonmetal containers. However, OSHA has determined that it is a de minimis violation of 1910.106(d)(2)(i) to store COMBUSTIBLE and FLAMMABLE liquids in polyethylene containers under certain conditions. It is thus permissible to use the DOT specification, nonspecification polyethylene and nonregulated containers for storing FLAMMABLE and COMBUSTIBLE liquids at inside storage areas under the following conditions:

1. The liquid within the container has a DOT exemption in effect for shipment in polyethylene containers and is identified as meeting the requirements of the DOT exemption.
2. The container storage area is provided with a fire detection system designed and installed to detect incipient stage fires and interconnected with an employee emergency alarm system, which will effectively alert employees when fire is detected.
3. In locations where employees are expected to perform fire fighting, the container storage area is provided with a fixed automatic fire suppression system designed and installed to control, if not extinguish, a fire involving the stored polyethylene containers.
4. Employees, except members on fire brigades, will be totally evacuated from the container storage area at the time of initial fire detection. Where fire brigades are provided, member employees will be

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trained in the specific methods for fighting fires involving polyethylene drums or containers, and in the recognition of hazards associated with fire fighting in such storage areas.

5. In general purpose warehouses, the container storage area is provided with diking, or curbing and drainage, which will contain the volume of stored liquids and the anticipated flow of fire extinguishing agent, and drain it to a remote impounding area having no employee exposure. Employee emergency exit routes may not intersect or pass over or under open drainage paths.

## G. Background.

1. U. S. Department of Transportation exemptions permit the the use of DOT specification and nonspecification polyethylene containers and nonregulated containers for transporting specifically identified Class B poisonous liquid and combustible and/or flammable liquids in motor vehicles, rail freight and cargo vessels. OSHA does not permit the storage of these liquids in DOT or non-Dot specification plastic containers. Therefore, a conflict exists and OSHA is trying to resolve it by accepting plastic containers under certain conditions.

2. OSHA has determined that it is a de minimis departure from 29 CFR 1910.106 to store All COMBUSTIBLE and FLAMMABLE liquids in plastic containers if the conditions set forth in F of this instruction are met. The terms combustible and flammable liquids are defined in the National Fire Protection Association Flammable and Combustible Liquids Code, NFPA No. 30, Chapter 1.

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