



EMERGENCY HANDLING OF HAZARDOUS MATERIALS IN SURFACE TRANSPORTATION

Edited by
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BUREAU OF EXPLOSIVES
NEW 24-hour EMERGENCY PHONE
202-835-9500

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Material not on fire and not involved in fire

Keep sparks, flames, and other sources of ignition away

Personnel protection

Approach fire with caution

Avoid breathing dusts, and fumes from burning material

Wear self-contained breathing apparatus when fighting fires involving this material

Evacuation

If fire becomes uncontrollable—evacuate for a radius of 1500 feet

VINYL ACETATE

4907270

FLAMMABLE LIQUID

UN1301

POLYMERIZABLE

ENVIRONMENTALLY HAZARDOUS SUBSTANCE (RQ-1000/454)

Vinyl acetate is a clear colorless liquid. It is used to make adhesives, paints, and plastics. It has a flash point of 18 deg. F. Its vapors are irritating to the eyes and respiratory system. If it is subjected to heat or becomes contaminated, it is subject to polymerization. If the polymerization takes place inside a container, the container is subject to violent rupture. It is lighter than water and slightly soluble in water. Its vapors are heavier than air.

It weighs 7.8 pounds per gallon.

Material on fire or involved in fire

Do not extinguish fire unless flow can be stopped

Use water in flooding quantities as fog

Solid streams of water may spread fire

Cool all affected containers with flooding quantities of water

Apply water from as far a distance as possible

Use "alcohol" foam, carbon dioxide or dry chemical

Material not on fire and not involved in fire

Keep sparks, flames, and other sources of ignition away

Keep material out of water sources and sewers

Build dikes to contain flow as necessary

Attempt to stop leak if without hazard

Use water spray to disperse vapors and dilute standing pools of liquid

Personnel protection

Avoid breathing vapors

Keep upwind

Wear boots, protective gloves, and goggles

Do not handle broken packages without protective equipment

Wash away any material which may have contacted the body with copious amounts of water or soap and water

Evacuation

If fire becomes uncontrollable or container is exposed to direct flame—evacuate for a radius of 2500 feet

If material leaking (not on fire), downwind evacuation must be considered

Environmental considerations—land spill

Dig a pit, pond, lagoon, holding area to contain liquid or solid material

Dike surface flow using soil, sand bags, foamed polyurethane, or foamed concrete

Absorb bulk liquid with fly ash, cement powder, sawdust, or commercial sorbents

Apply "universal" gelling agent to immobilize spill

Apply fluorocarbon-water foam to diminish vapor and fire hazard

Environmental considerations—water spill

Use natural barriers or oil spill control booms to limit spill motion

Use surface active agent (e.g. detergent, soaps, alcohols) to compress and thicken spilled material

Inject "universal" gelling agent to solidify encircled spill and increase effectiveness of booms

If dissolved, apply activated carbon at ten times the spilled amount in region of 10ppm or greater concentration

Remove trapped material with suction hoses

Use mechanical dredges or lifts to remove immobilized masses of pollutants and precipitates

Environmental considerations—air spill

Apply water spray or mist to knock down vapors

VINYL CHLORIDE

4905792

FLAMMABLE GAS

UN1086

Vinyl chloride is a colorless gas with a sweet odor. It is used to make plastics and adhesives, and to make other chemicals. It is shipped as a liquefied gas under its vapor pressure. Contact with the liquid can cause frostbite. It is easily ignited. Its vapors are heavier than air and a flame can flash back to the source of leak very easily. This leak may be either a liquid or vapor leak. It can asphyxiate by the displacement of air. Under fire conditions the cylinders or tank cars may violently rupture and rocket. Prolonged exposure of the cylinders or tank cars to heat or fire may cause the material to polymerize with possible container rupture. This material is a cancer suspect agent on long term exposure to low concentrations. However, this effect has not been demonstrated for single exposures to high concentrations of the material.

If material on fire or involved in fire

Do not extinguish fire unless flow can be stopped

Use water in flooding quantities as fog

Cool all affected containers with flooding quantities of water

Apply water from as far a distance as possible

Material not on fire and not involved in fire

Keep sparks, flames, and other sources of ignition away

Keep material out of water sources and sewers

Attempt to stop leak if without hazard

Use water spray to knock-down vapors

Personnel protection

Avoid breathing vapors

Keep upwind

Wear self-contained breathing apparatus

Wear protective gloves and goggles

Do not handle broken packages without protective equipment

Approach fire with caution

Evacuation

If fire becomes uncontrollable or container is exposed to direct flame—evacuate for a radius of 2500 feet

If material leaking (not on fire), downwind evacuation must be considered

VINYL ETHYL ETHER, INHIBITED

4907275

FLAMMABLE LIQUID

UN1302

POLYMERIZABLE

Vinyl ethyl ether, inhibited is a clear colorless liquid with an ether-like odor. It has a flash point of less than -50 deg. F. If the material is subject to heat for prolonged periods or becomes contaminated, it is subject to polymerization with evolution of heat. If the polymerization takes place inside a container, the container may violently rupture. The material is lighter than water and slightly soluble in water its vapors are heavier than air.

If material on fire or involved in fire

Do not extinguish fire unless flow can be stopped

Use water in flooding quantities as fog

Solid streams of water may spread fire

Cool all affected containers with flooding quantities of water

Apply water from as far a distance as possible

Use "alcohol" foam, carbon dioxide or dry chemical

Material not on fire and not involved in fire

Keep sparks, flames, and other sources of ignition away

Keep material out of water sources and sewers

Build dikes to contain flow as necessary

Attempt to stop leak if without hazard

Use water spray to knock-down vapors

Personnel protection

Avoid breathing vapors

Keep upwind

Wear self-contained breathing apparatus

Wear boots, protective gloves, and goggles

Do not handle broken packages without protective equipment

Wash away any material which may have contacted the body with copious amounts of water or soap and water

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