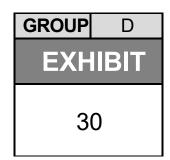


NATIONAL TRANSPORTATION SAFETY BOARD Investigative Hearing

Norfolk Southern Railway general merchandise freight train 32N derailment with subsequent hazardous material release and fires, in East Palestine, Ohio, on February 3, 2023



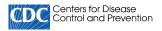
Agency / Organization

Oxy Vinyls, LP

Title

## **Oxy Vinyls SDS Source 4 NIOSH Vinyl Chloride Monomer**

Docket ID: DCA23HR001





# The National Institute for Occupational Safety and Health (NIOSH)



## Vinyl chloride

#### SYNONYMS & TRADE NAMES Chloroethene, Chloroethylene, Ethylene monochloride, Monochloroethene, Monochloroethylene, VC, VCM, Vinyl chloride monomer (VCM) CAS NO. RTECS NO. DOT ID & GUIDE 75-01-4 KU9625000 1086 116P(inhibited) CONVERSION FORMULA IDLH CH2=CHCI $1 \text{ ppm} = 2.56 \text{ mg/m}^3$ Ca [N.D.] See: IDLH INDEX **EXPOSURE LIMITS** MEASUREMENT METHODS NIOSH REL NIOSH 1007; Ca See Appendix A **OSHA**4,75 OSHA PEL See: NMAM or OSHA Methods [1910.1017] TWA 1 ppm C 5 ppm [15-minute] PHYSICAL DESCRIPTION Colorless gas or liquid (below 7°F) with a pleasant odor at high concentrations. [Note: Shipped as a liquefied compressed gas.] MOLECULAR BOILING FREEZING SOLUBILITY VAPOR IONIZATION POINT POTENTIAL WEIGHT POINT PRESSURE (77°F): 0.1% 62.5 7°F -256°F 9.99 eV 3.3 atm FLASH POINT UPPER LOWER RELATIVE GAS **EXPLOSIVE** DENSITY **EXPLOSIVE** LIMIT LIMIT NA (Gas) 2.21 33.0% 3.6%

#### Flammable Gas

#### INCOMPATIBILITIES & REACTIVITIES

Copper, oxidizers, aluminum, peroxides, iron, steel [Note: Polymerizes in air, sunlight, or heat unless stabilized by inhibitors such as phenol. Attacks iron & steel in presence of moisture.]

EXPOSURE ROUTES

inhalation, skin and/or eye contact (liquid)

#### SYMPTOMS

lassitude (weakness, exhaustion); abdominal pain, gastrointestinal bleeding; enlarged liver; pallor or cyanosis of extremities; liquid: frostbite; [potential occupational carcinogen]

TARGET ORGANS

Liver, central nervous system, blood, respiratory system, lymphatic system

CANCER SITE

[liver cancer]

PERSONAL PROTECTION/SANITATION

#### (See protection codes)

Skin:Frostbite Eyes:Frostbite Wash skin:No recommendation Remove:When wet (flammable) Change:No recommendation Provide:Frostbite wash

#### FIRST AID

### (See procedures) Eye:Frostbite

Skin:Frostbite Breathing:Respiratory support

RESPIRATOR RECOMMENDATIONS

(See Appendix E)

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

#### Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection

SEE ALSO