



Safety Data Sheet

Version 7.1
Revision Date: 04/09/2024

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **Vinyl acetate-d₆**
Product abbreviation: d6Vac
Product use: For laboratory research purposes.
Supplier / Manufacturer: Polymer Source, Inc.
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2. HAZARDS IDENTIFICATION

Emergency overview: Target organs: Central nervous system, Liver, Cardiovascular system, Blood, Kidney, Eyes.

WHMIS classification: B2. Flammable liquid.
D2A. Very toxic material causing other toxic effects:
Carcinogen. Moderate respiratory irritant.

GHS classification: Flammable liquids (Category 2).
Acute toxicity, Oral (Category 5).
Acute toxicity, Inhalation (Category 4).
Acute toxicity, Dermal (Category 5).
Carcinogenicity (category 2).
Specific target organ toxicity – single exposure (Category 3),
Respiratory system.
Acute aquatic toxicity (Category 3).
Chronic aquatic toxicity (Category 3).

GHS Label elements, including precautionary statements:

Pictogram:

Signal word: Danger

Hazard statements: H225. Highly flammable liquid and vapour.
H303 + H313. May be harmful if swallowed or in contact with skin.
H332. Harmful if inhaled.
H335. May cause respiratory irritation.

H351. Suspected of causing cancer.

H412. Harmful to aquatic life with long lasting effects.

- Precautionary statements:
- P201. Obtain special instructions before use.
 - P202. Do not handle until all safety precautions have been read and understood.
 - P210. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P233. Keep container tightly closed.
 - P240. Ground and bond container and receiving equipment.
 - P241. Use explosion-proof electrical, ventilating, lighting equipment.
 - P242. Use non-sparking tools.
 - P243. Take action to prevent static discharges.
 - P261. Avoid breathing dust, fume, gas, mist, vapours, spray.
 - P271. Use only outdoors or in a well-ventilated area.
 - P273. Avoid release to the environment.
 - P280. Wear protective gloves/ protective clothing/ eye protection/ face protection.
 - P303 + P361 + P353. If on skin (or hair):
Take off immediately all contaminated clothing.
Rinse skin with water.
 - P304 + P340 + P312.. If inhaled:
Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor / physician if you feel unwell.
 - P312. Call a POISON CENTER or doctor / physician if you feel unwell.
 - P370 + P378. In case of fire:
Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
 - P403 + P233. Store in a well-ventilated place.
Keep container tightly closed.
 - P403 + P235. Store in a well-ventilated place. Keep cool.
 - P405. Store locked up.
 - P501. Dispose of contents / container to an approved waste disposal plant.

HMIS classification:	Health hazard:	2
	Chronic health hazard:	*
	Flammability:	3
	Physical hazards:	0

Potential health effects:	Inhalation:	May be harmful if inhaled. Causes respiratory tract irritation.
	Skin:	May be harmful if absorbed through skin. Causes skin irritation.
	Eyes:	Causes eye irritation.
	Ingestion:	May be harmful if swallowed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Formula:	Vinyl acetate-d ₆ :	C ₄ D ₆ O ₂
Synonym:	Acetoxyethylene-d ₆	
Concentration:		≥ 99.8 %
CAS registry number:	Vinyl acetate-d ₆ :	189765-98-8

4. FIRST AID MEASURES

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact:	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact:	Flush eyes with water as a precaution.
If swallowed:	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Conditions of flammability:	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat, sparks, open flame, hot surface. No smoking.
Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards arising from the chemical:	Flash back possible over considerable distance. Container explosion may occur under fire conditions.
Special protective equipment for firefighters:	Wear self contained breathing apparatus for firefighting if necessary.
Hazardous combustion products:	Hazardous decomposition products formed under fire conditions: Carbon oxides.
Explosion data:	Sensitivity to mechanical impact: no data available Sensitivity to static discharge: no data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
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Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up:	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling:	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition – No smoking. Take measures to prevent the build up of electrostatic charge.
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature 2 – 8 °C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment:

- Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- Eye protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Skin and body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
- Specific engineering controls: Use mechanical exhaust or laboratory fumehood to avoid exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Form:	Liquid
	Colour:	Colourless

Safety data:	pH:	no data available
	Melting point / Freezing point:	m.p.(lit.): -93 °C (-135 °F)
	Boling point:	b.p.(lit.): 72–73 °C (162–163 °F)
	Flash point:	(lit.): -7.99 °C (17.62 °F) – closed cup
	Ignition temperature:	(lit.): 427 °C (801 °F)
	Auto-ignition temperature:	no data available
	Lower explosion limit:	no data available
	Upper explosion limit:	no data available
	Vapour pressure:	no data available
	Density:	no data available
	Water solubility:	no data available
	Partition coefficient: n-octanol/water:	no data available
	Relative vapour density:	no data available
	Odour:	no data available
	Odour threshold:	no data available
	Evaporation rate:	no data available

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under recommended storage conditions.
Radioactivity:	Stable isotope compound. Not radioactive.
Possibility of hazardous reactions:	Unstable upon depletion of inhibitor. Vapours may form explosive mixture with air.
Conditions to avoid:	Heat, flames and sparks.
Materials to avoid:	Acids, Bases, Oxidizing agents, Peroxides.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions: Carbon oxides. Other decomposition products: no data available.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Oral LD50:	no data available
	Inhalation LC50:	no data available
	Dermal LD50:	no data available
	Other information on acute toxicity:	no data available
Skin corrosion/irritation:	no data available	
Serious eye damage/eye irritation:	no data available	
Respiratory or skin sensitization:	no data available	
Germ cell mutagenicity:	no data available	

Carcinogenicity:	Limited evidence of carcinogenicity in animal studies.		
	IARC:	Group 2B: Probably carcinogenic to humans (Vinyl acetate).	
Reproductive toxicity:	no data available		
Teratogenicity:	no data available.		
Specific target organ toxicity:	Single exposure (Globally Harmonized System):	no data available	
	Repeated exposure (Globally Harmonized System):	no data available	
Aspiration hazard:	no data available		
Potential health effects:	Inhalation:	May be harmful if inhaled. Causes respiratory tract irritation.	
	Ingestion:	May be harmful if swallowed.	
	Skin:	May be harmful if absorbed through skin. Causes skin irritation.	
	Eyes:	Causes eye irritation.	
Synergistic effects:	no data available		
Additional information:	RTECS:	not available	

12. ECOLOGICAL INFORMATION

Toxicity:	no data available
Persistence and degradability:	no data available
Bioaccumulative potential:	no data available
Mobility in soil:	no data available
PBT and vPvB assessment:	no data available
Other adverse effects:	no data available

13. DISPOSAL CONSIDERATIONS

Product:	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging:	Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US):	UN number: 1301	Class: 3	Packing group: II
	Proper shipping name: Vinyl acetate-d6		
	Reportable Quantity (RQ): 5000 lbs		
	Marine pollutant: No		
	Poison Inhalation Hazard: No		

IMDG: UN number: 1301 Class: 3 Packing group: II
EMS-No: F-E, S-D
Proper shipping name: Vinyl acetate-d6
Marine pollutant: No

IATA: UN number: 1301 Class: 3 Packing group: II
Proper shipping name: Vinyl acetate-d6

15. REGULATORY INFORMATION

WHMIS classification: B2. Flammable liquid.
D2A. Very toxic material causing other toxic effects:
Carcinogen. Moderate respiratory irritant.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

Date of the latest revision: 4 September 2024

Further information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Polymer Source, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See www.polymersource.ca for additional terms and conditions of sale.