

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Target organs Review Section 2 and 11 for any additional assessments.

Note: Residual formaldehyde gas may be released from this product during processing. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. OSHA has listed formaldehyde as a potential human carcinogen. See the OSHA formaldehyde standard 29 CFR 1910.1048 for further details. The International Agency for Research on Cancer (IARC) has classified formaldehyde as carcinogenic to humans.

Over-exposure signs/symptoms

Inhalation No specific data.

Ingestion No specific data.

Skin No specific data.

Eyes No specific data.

Medical conditions aggravated by over-exposure None known.

See section 11 for more detailed information on health effects and symptoms.

3. Composition/Information on ingredients

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>
Vinyl Acetate	108-05-4	0.1 - 1.0

** Any applicable Canadian trade secret numbers will be listed in Section 15.

4. First aid measures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

Ingestion Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first aid personnel No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-

to-mouth resuscitation.

Notes to physician

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Flammability of the product

In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable

Use an extinguishing agent suitable for the surrounding fire.

Not suitable

None known.

Special exposure hazards

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous combustion products

Decomposition products may include the following materials: carbon oxides,

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Ingredient name

Vinyl Acetate

Occupational exposure limits

ACGIH TLV 8-hr TWA
35 mg/m³ 10 ppm

ACGIH TLV STEL (15 min)
53 mg/m³ 15 ppm

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Form	Liquid
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Flammable limits	
Lower:	Not applicable
Upper:	Not applicable
Color	Opaque
pH	5.0 - 5.5 @ 25 °C(77 °F)
Boiling point	Greater than 100 °C(212 °F)
Relative density	Approx. 1.2
Vapor pressure	Not applicable
Viscosity	Dynamic- 2,000 - 2,500 cPs
Solubility	Infinite
Evaporation rate	Less than 1 (n-Butyl acetate=1)
Vapor density	Not applicable
Typical % solids	50.0 % (m)

10. Stability and reactivity

Stability
The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid
Strong oxidizer,

Materials to avoid
Reactive or incompatible with the following materials: oxidizing materials, acids,

Hazardous decomposition products
carbon oxides,

11. Toxicological information

Acute toxicity

Ingredient name

Vinyl Acetate		
LD50 Oral	Rat	2,900 mg/kg
LD50 Oral	Mouse	1,600 mg/kg

LC50 Inhalation	Rat	11.4 mg//4 h
LC50 Inhalation	Mouse	1550 ppm/4 h
LC50 Inhalation	Rabbit	2500 ppm/4 h
LC50 Inhalation	Guinea pig	6200 ppm/4 h
LD50 Dermal	Rabbit	2,335 mg/kg

Other Toxicological Information

Carcinogenicity

Conclusion/Summary

Vinyl acetate vapors have been shown to cause tumors of the respiratory tract of laboratory animals in lifetime inhalation studies at high exposure levels (600 ppm).

Classification

Ingredient name

Vinyl Acetate

ACGIH	Confirmed animal carcinogen with unknown relevance to humans.
IARC	Possibly carcinogenic to humans (Group 2B)
NTP	Not listed
OSHA	Not regulated

12. Ecological information

Environmental effects

No known significant effects or critical hazards.

Aquatic ecotoxicity

Ingredient name

Vinyl Acetate

Fresh water Acute LC50 14 mg//96 h

Fathead minnow

Other adverse effects

No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transportation

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International transport regulations

<u>Regulatory information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Classes/*PG</u>	<u>Reportable Quantity (RQ)</u>
CFR		Non-regulated		
TDG		Non-regulated		

IMO/IMDG Non-regulated
IATA (Cargo) Non-regulated

*PG : Packing group

15. Regulatory information

US regulations HCS Classification

Carcinogen

U.S. Federal regulations

SARA 311/312 Classification Delayed (chronic) health hazard

SARA 313 - Supplier Notification

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.
Diethylene Glycol Ethyl Ether Acetate - 112-15-2 (2.85%), Vinyl Acetate - 108-05-4 (0.16%),

SARA 302 Extremely Hazardous Substances None required.

State regulations

Massachusetts RTK Substances None required.

New Jersey RTK Hazardous Substances The following components are listed:
Diethylene Glycol Ethyl Ether Acetate, Vinyl Acetate,

Pennsylvania RTK Hazardous Substances The following components are listed:
Diethylene Glycol Ethyl Ether Acetate, Vinyl Acetate,

California Prop. 65: WARNING: This product contains a chemical known to the State of California to cause cancer. Formaldehyde - 50-00-0, Acetaldehyde - 75-07-0,

Canada
WHMIS (Canada)

Class D-2A: Material causing other toxic effects (Very toxic).

Canadian lists

Canadian NPRI: None required.

International regulations Chemical Inventories

Europe inventory All components are listed or exempted.
Japan inventory (ISHL) Not determined.
Philippines inventory (PICCS) Not determined.
New Zealand Inventory of Chemicals (NZIoC) Not determined.
Japan inventory (ENCS) Not determined.
Korea inventory (KECI) Not determined.
Australia inventory (AICS) All components are listed or exempted.
China inventory (IECSC) Not determined.
Canada inventory At least one component is not listed in DSL but all such components are listed in NDSL.
United States inventory (TSCA 8b) All components are listed or exempted.

16. Other information

Hazardous Material
Information System III
(U.S.A.)

Health : 1
Flammability: 0
Physical hazards : 0
Chronic : *

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