

Safety Data Sheet

Product No. 19223 Vinylec® E Resin - Formvar® substitute

Issue Date (05-14-15)

Review Date (11-6-15)

Section 1: Product and Company Identification

Product Name: Vinylec® E - Formvar® substitute

Synonym: Polyvinyl Formal Resin

Company Name

Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477

Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

Section 2: Hazard Identification

2.1 Classification of the substance or mixture

GHS Pictograms:



GHS07

GHS Categories: Irritant

Acute Toxicity 4:	H302 Harmful if swallowed.
Acute Toxicity 4:	H312 Harmful in contact with skin.
Acute Toxicity 4:	H332 Harmful if inhaled.
Skin Irritant 2:	H315 Causes skin irritation

2.2 Label elements

Hazard pictograms



GHS07

Signal word: Warning

Hazard statements:

H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H315	Causes skin irritation.

Precautionary statements:

- P261 Wear protective gloves/protective clothing/eye protection/face protection.
P322 Specific measures (see on this label).
P362 Take off contaminated clothing and wash before reuse.
P420 Store away from flammable substances.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Labels: Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

Labels: Xi; Irritant

R38: Irritating to skin.

Risk phrases:

20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

38: Irritating to skin.

Safety phrases:

9 - Keep container in a well-ventilated place.

23 - Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer).

36/37 - Wear suitable protective clothing and gloves.

60 - This material and its container must be disposed of as hazardous waste

Health Effects:

NFPA Hazard Rating: Health: 0; Fire: 0; Reactivity: 0

HMIS® Hazard Rating: Health: 0; Fire: 0; Reactivity: 0

(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment: A Chemical Safety Assessment has not been carried out.

PBT: ND

vPvB: ND

Emergency overview:

Appearance: Light to yellow free-flowing powder.

Immediate effects: Irritation to eyes, coughing and wheezing.

Potential health effects

Primary Routes of entry: Inhalation, eye and skin contact.

Signs and Symptoms of Overexposure: ND

Eyes: Eye Irritant

Skin: Skin Irritant

Ingestion: Harmful if swallowed. May cause nausea and vomiting.

Inhalation: Harmful if inhaled.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: Yes.

See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Principle Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m ³	ACGIH TLV mg/m ³	NTP Carcinogen	IARC Carcinogen	OSHA regulated Carcinogen
Polyvinyl formal (63450-15-7)	50-100	5	10	No	No	No
Formaldehyde (50-00-0)	<0.1	3	2	Yes	Yes	Yes

Section 4: First Aid Measures

If accidental overexposure is suspected

Eye(s) Contact: Rinse opened eye for several minutes under running water.

Skin Contact: Immediately wash with water and soap and rinse thoroughly.

Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

Ingestion: Call for a doctor immediately.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Note to physician

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures

Flash Point: ND

Flammable Limits: ND

Auto-ignition point: Product is not self-igniting.

Fire Extinguishing Media: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special Fire Fighting Procedures: Mouth respiratory protective device.

Unusual Fire and Explosion Hazards: Product does not present an explosion hazard.

Hazardous combustion products: ND

DOT Class: Not regulated

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:

Personal precautions, protective equipment and emergency procedures: Not required.

Environmental precautions: No special measures required.

Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Waste Disposal Methods: Dispose contaminated material as waste according to section 13. Ensure adequate ventilation.

Dispose of waste according to Federal, State and Local Regulations.

Section 7: Handling and Storage

Precautions to be taken in Handling and Storage:

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Keep receptacle tightly sealed.

Storage temperature: Room temperature.

Storage Pressure: ND

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Provide sufficient ventilation to minimize exposure. Use local mechanical exhaust ventilation.

Personal Protection Equipment

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the skin. Avoid contact with the eyes and skin

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protective gloves: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application. Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Skin protection: ND

Eye protection: Goggles recommended during refilling.

Additional clothing and/or equipment: ND

Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Light yellow powder

Odor: Pungent

Specific Gravity (H₂O=1): 1.1 – 1.3

Vapor Pressure (mm Hg): ND

Vapor Density (air=1): ND

Percent Volatile by volume: 2.2 max
Evaporation Rate (butyl acetate=1): ND
Boiling Point: ND
Freezing point / melting point: 103 - 113°C
pH: ND
Solubility in Water: Not miscible or difficult to mix.
Molecular Weight: 95,000 ~ 134,000 (weight average)

Section 10: Stability and Reactivity

Stability: Stable under normal conditions.
Conditions to Avoid: None known.
Materials to Avoid (Incompatibility): No further relevant information available.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, formaldehyde, acetic acid, acrolein.
Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Results of component toxicity test performed:
Oral LD50 (rat) : >5.010 mg/kg. Dermal LD50 (rabbit) : >2.000 mg/kg. Eye irritation (rabbit): 3.3 on a scale of 110. Skin irritation (rabbit): 0.0 on a scale of 8.0.
Primary irritant effect: On the skin: Irritant to skin and mucous membranes.
On the eye: No irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations: Harmful, Irritant
Human experience: ND
This product **does** contain compounds listed by NTP or IARC or regulated by OSHA as a carcinogen. Formaldehyde (50-00-0).

Section 12: Ecological Information

Ecological Information: Eco toxicity is expected to be low based on the low water solubility of polymers.
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Bio accumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Additional ecological information:
General notes: Generally not hazardous for water.
Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: None
Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information

US DOT Information: Proper shipping name: Not regulated

IATA: Proper shipping name: Not regulated

Marine Pollutant: No

Canadian TDG: Not regulated

Section 15: Regulatory Information**United States Federal Regulations**

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: None of the ingredients is listed.

SARA Title III: None of the ingredients is listed.

RCRA: Not listed.

TSCA: All ingredients are listed on the public inventory.

CERCLA: Not listed.

State Regulations

California Proposition 65: Warning: This product contains a chemical(s) known to the State of California to cause cancer. Formaldehyde, (50-00-0) at < 0.1 %

International Regulations

Canada WHMIS: ND

Europe EINECS Numbers: ND

Section 16: Other Information

Label Information: Irritant, Harmful

European Risk and Safety Phrases:

Risk: R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. R38:

Irritating to skin.

Safety: S9: Keep container in a well-ventilated place. S23: Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer).

S36/37: Wear suitable protective clothing and gloves. S60: This material and its container must be disposed of as hazardous waste.

European symbols needed: Xi, X_n

Canadian WHMIS Symbols: ND

Abbreviations used in this document

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

Disclaimer

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these

materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.

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