

Safety Data Sheet

Product No. 18510 Formalin, 10% Neutral

Buffered

Issue Date (08-29-13)

Review Date (01-09-15)

Section 1: Product and Company Identification

Product Name: Formalin, 10% Neutral Buffered

Synonym: None

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

GHS Pictograms:



Health hazard



Irritant

GHS Categories:

GHS08: Health hazard - H351, Suspected of causing cancer.

GHS07: Irritant - H317 May cause an allergic skin reaction.

H227, Combustible liquid.

Signal Word: DANGER

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

Label: X_n - Harmful

R20/21/22-40: Harmful by inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect.

Label: X_i; Sensitizing

R43: May cause sensitisation by skin contact.

Hazard-determining components of labeling: formaldehyde 50-00-0

Risk phrases:

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

40 - Limited evidence of a carcinogenic effect.

43 - May cause sensitisation by skin contact.

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: 2; Fire: 2; Reactivity: 0

HMIS® Hazard Rating: Health: 2; Fire: 2; Reactivity: 0

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

Results of PBT and vPvB assessment:

PBT: Not applicable

vPvB: Not applicable

Emergency overview

Appearance: Liquid

Immediate effects: ND

Potential health effects

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

Signs and Symptoms of Overexposure: ND

Eyes: Harmful in contact with eyes.

Skin: May cause sensitisation by skin contact. Harmful in contact with skin.

Ingestion: Harmful if swallowed.

Inhalation: Harmful by inhalation.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: Formaldehyde (50-00-0).

See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m³	ACGIH TLV mg/m³	NTP	IARC	OSHA regulated
Formaldehyde (50-00-0) H301; H311; H331; H351; H314; H317	~4	TWA 0.75 ppm	0.37 mg/m ³ 0.3 ppm	R	Group 1	Yes
Methyl Alcohol (67-56-1) H225; H301; H311; H331; H370	1-2	260 mg/m ³ 200 ppm	250 ppm	No	No	No

Section 4: First Aid Measures

If accidental overexposure is suspected

General information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
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 and to be sure call for a doctor. In case of unconsciousness, place patient stably in side position for transportation.
Ingestion: Immediately call a doctor.

Note to physician

Treatment: No further relevant information available.

Medical Conditions generally Aggravated by Exposure: No further relevant information available.

Section 5: Fire Fighting Measures

Flash Point: 85 °C

Flammable Limits: NE

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

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

Special Fire Fighting Procedures: Advice for firefighters use protective equipment: Mouth respiratory protective device.

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

Hazardous combustion products: Oxides of Carbon.

DOT Class: Not regulated.

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Do not allow to enter sewers/ surface or ground water. Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Waste Disposal Methods: 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: NA

Section 8: Exposure Controls / Personal Protection

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 eyes and skin.

Engineering Controls

Ventilation required: Ensure good ventilation/exhaustion at the workplace.

Personal Protection Equipment

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protective gloves: Wear protective gloves.

Skin protection: Wear protective gloves and clothing.

Eye protection: Use goggles or face shield.

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: According to product specification and Liquid.

Odor (threshold): Characteristic (ND)

Specific Gravity (H₂O=1): 0.9903 g/cm³

Vapor pressure at 20 °C: 23 hPa

Vapor Density (air=1): ND

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): ND

Boiling Point: 100 °C

Freezing point / melting point: ND

pH: 7.1

Solubility in Water: Fully miscible.

Organic solvents: 4.6 %, Water: 94.7 %

Molecular Weight: NA

Section 10: Stability and Reactivity

Stability: Stable.

Conditions to Avoid: No further relevant information available.

Materials to Avoid (Incompatibility): No further relevant information available.

Hazardous Decomposition Products: No decomposition if used according to specifications.

Hazardous Polymerization: No dangerous reactions known.

Section 11: Toxicological Information

Results of component toxicity test performed:

Acute toxicity: · LD/LC50 values that are relevant for classification: 50-00-0 formaldehyde.

Oral LD50 >200 mg/kg (rat)

Primary irritant effect: On the skin: No irritant effect. On the eye: No irritating effect.

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful, Irritant.

Carcinogenic categories:

IARC (International Agency for Research on Cancer): 50-00-0 formaldehyde - 1

NTP (National Toxicology Program): 50-00-0 formaldehyde - R

Human experience: ND

This product **does** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen. See Section 3.

Section 12: Ecological Information

Ecological Information:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information: General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: ND

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.

Hazard Class: NA

Packaging group: NA

UN Number: NA

Limitations: Reportable Quantity (RQ): 2500 lbs. At RQ limit is regulated. US DOT, Combustible liquid, n.o.s. (Formaldehyde, Methanol), 3, NA1993.

IATA: Proper shipping name: Not regulated.

Hazard Class: NA

Packing group: NA

UN Number: NA

Limitations: Formaldehyde solutions from 10% to 24.9% are regulated by IATA as: UN3334, Aviation regulated, n.o.s. (10%-24.9% Formaldehyde solution). Office of Hazardous Materials Safety Regulations and Interpretations; Refer# 01-0271. Refer to IATA for specific operator regulations.

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: Section 355 (extremely hazardous substances): 50-00-0 formaldehyde
SARA Title III: Section 313 (Specific toxic chemical listings): 50-00-0 formaldehyde.
67-56-1 Methyl Alcohol.
RCRA: ND
TSCA (Toxic Substances Control Act): All ingredients are listed.
CERCLA: Formaldehyde 50-00-0: RQ = 100 lbs (45.4 Kg).

State Regulations

California Proposition 65:
Chemicals known to cause cancer: 50-00-0 formaldehyde
Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.
Chemicals known to cause developmental toxicity: 67-56-1 Methyl Alcohol.

Carcinogenic categories:

EPA (Environmental Protection Agency): 50-00-0 formaldehyde - B1
TLV (Threshold Limit Value established by ACGIH): 50-00-0 formaldehyde - A2
NIOSH-Ca (National Institute for Occupational Safety and Health): 50-00-0 formaldehyde
OSHA-Ca (Occupational Safety & Health Administration): 50-00-0 formaldehyde

International Regulations

Canada WHMIS: Canadian substance listings:
Canadian Domestic Substances List (DSL): All ingredients are listed.
Canadian Ingredient Disclosure list (limit 0.1%): 50-00-0 formaldehyde.
Canadian Ingredient Disclosure list (limit 1%): None of the ingredients is listed.
Europe EINECS Numbers: ND

Section 16: Other Information

Label Information: Health Hazard.
European Risk and Safety Phrases: See Section 2.
European symbols needed: X, Harmful.
Canadian WHMIS Symbols:
B3 - Combustible liquid.
D2B - Toxic material causing other toxic effects.

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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