

Safety Data Sheet

Product No. 18306-4221 ERL 4221 Epoxide Resin

Issue Date (04-09-15)

Review Date (08-31-17)

Section 1: Product and Company Identification

Product Name: ERL 4221 Epoxide Resin

Synonym: none

Company Name

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

Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day

CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day

Section 2: Hazard Identification

2.1 Classification of the substance or mixture

GHS Pictograms



GHS07

GHS Categories

GHS07: Irritant

Skin Sens. 1

H317: May cause an allergic skin reaction.

2.2 Label elements

Hazard Pictograms



GHS07

Signal Word: Warning

Hazard-determining components of labeling: 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicycl[4.1.0]hept-3-ylmethly ester

Hazard Statements

H317 May cause an allergic skin reaction.

Precautionary Statements

P261 Avoid breathing dust/fumes/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

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

Irritant: May cause sensitisation by skin contact.

Information concerning particular hazards for human and environment: The product has to be labeled due to the calculation procedure of international guidelines.

Classification system: The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

Labeling according to EU guidelines: The product has been classified and marked in accordance with directives on hazardous materials.

Code letter and hazard designation of product: Irritant.

Hazard-determining components of labeling:

7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicycl[4.1.0]hept-3-ylmethly ester.

Risk phrases:

May cause sensitisation by skin contact.

Safety phrases:

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

Avoid contact with skin.

Wear suitable gloves.

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

Health Effects:

NFPA Hazard Rating: Health: 2; Fire: 1; Reactivity: 1

HMIS® Hazard Rating: Health: 2; Fire: 1; Reactivity: 1

(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: NA

vPvB: NA

Emergency overview

Appearance: Colorless liquid.

Immediate effects: ND

Potential health effects

Primary Routes of entry: Ingestion, inhalation, eye and skin contact.

Signs and Symptoms of Overexposure: ND

Eyes: ND

Skin: May cause sensitisation by skin contact.

Ingestion: ND

Inhalation: ND

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: None listed

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
7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicycl[4.1.0]hept-3-ylmethly ester (2386-87-0) <small>Skin Sens. 1: H317</small>	50-100	ND	ND	No	No	No

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 and to be sure call for a doctor. In case of unconsciousness, place patient stably in side position for transportation.
Ingestion: If symptoms persist, consult doctor.

Note to physician

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

Section 5: Fire Fighting Measures

Flash Point: 118 °C
Flammable Limits: ND
Auto-ignition point: NA
Fire Extinguishing Media: Use firefighting measures that suit the environment.
Special Fire Fighting Procedures: ND
Unusual Fire and Explosion Hazards: Product does not present an explosion hazard.
Hazardous combustion products: ND
DOT Class: None

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: 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.
Storage temperature: Room temperature.
Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Use with good ventilation.

Personal Protection Equipment

General protective and hygienic measures: Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
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.

Skin protection: Wear gloves and protective clothing as required.

Eye protection: Goggles recommended.

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: Colorless liquid

Odor (threshold): Odorless (NA)

Specific Gravity (H₂O=1): ND

Vapor Pressure (mm Hg): ND

Vapor Density (air=1): ND

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): ND

Boiling Point: > 250 °C

Freezing point / melting point: ND

pH: ND

Organic solvents: 0.0 %

Solubility in Water: Not miscible or difficult to mix.

Molecular Weight: ND

Section 10: Stability and Reactivity

Stability: Stable

Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

Conditions to avoid: ND

Incompatible materials: ND

Hazardous decomposition products: None known.

Hazardous Polymerization: None known.

Section 11: Toxicological Information

Results of component toxicity test performed: ND

Primary irritant effect: None

Sensitization: Sensitization possible through skin contact.

Human experience: ND

This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

Section 12: Ecological Information

Aquatic toxicity: ND

Persistence and degradability: ND

Bioaccumulative potential: ND

Mobility in soil: ND

Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: ND

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

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

SARA: Section 355 (extremely hazardous substances): None of the ingredients is listed.

SARA Title III: Section 313 (Specific toxic chemical listings): None of the ingredients is listed

RCRA: ND

TSCA (Toxic Substances Control Act):

2386-87-0, 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester.

2611-00-9, 3-Cyclohexene-1-carboxylic acid, 3-cyclohexen-1-ylmethyl ester.

CERCLA: None listed.

State Regulations

California Proposition 65: None of the ingredients is listed.

Canadian substance listings:

Canadian Domestic Substances List (DSL):

2386-87-0, 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester.

2611-00-9, 3-Cyclohexene-1-carboxylic acid, 3-cyclohexen-1-ylmethyl ester.

Canadian Ingredient Disclosure list (limit 0.1%): None of the ingredients is listed.

International Regulations

Canada WHMIS: D2B - Toxic material causing other toxic effects.

Europe EINECS Numbers: ND

Section 16: Other Information

Label Information: Irritant.

European Risk and Safety Phrases: See Section 2

European symbols needed: Irritant

Canadian WHMIS Symbols: 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.