Section 1: Product and Company Identification

Product Name: Glutaraldehyde, 8% EM grade
Synonym: Glutaral, Glutaric Dialdehyde
Chemical Family: Aldehydes

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:

GHS05  GHS07  GHS08

GHS Categories:

GHS08
Health
Resp. Sens. 1  H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

GHS05
Corrosion
Eye Dam. 1  H318: Causes serious eye damage.

GHS07
Irritant
Skin Irrit. 2  H315: Causes skin irritation.
Skin Sens. 1  H317: May cause an allergic skin reaction.
STOT SE 3  H335-H336: May cause respiratory irritation. May cause drowsiness or dizziness.

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008
This product is classified according to the CLP regulation.

Hazard pictograms
Signal word: DANGER

Hazard-determining components of labelling:
Glutaraldehyde

Hazard statements
H315  Causes skin irritation.
H318  Causes serious eye damage.
H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317  May cause an allergic skin reaction.
H335  May cause respiratory irritation.

Precautionary statements
P285  In case of inadequate ventilation wear respiratory protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310  Immediately call a POISON CENTER/doctor.
P321  Specific treatment (see on this label).
P405  Store locked up.
P501  Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other Hazards
Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC
Risk phrases:
R20/22: Harmful by inhalation and if swallowed.
R42/43: May cause sensitisation by inhalation and skin contact.
R37/38-41: Irritating to respiratory system and skin. Risk of serious damage to eyes.
41 Risk of serious damage to eyes.

Safety phrases:
23 Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer).
24 Avoid contact with skin.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37/39 Wear suitable gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
60 This material and its container must be disposed of as hazardous waste.

Health Effects:
HMIS® Rating: Health: 2; Fire: 2; Reactivity: 0
NFPA Rating: Health: 2; Fire: 2; Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Emergency overview
Appearance: Transparent Liquid
Immediate effects:

**Potential health effects**

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

Signs and Symptoms of Overexposure: ND

Eyes: Causes serious eye damage.

Skin: Causes skin irritation and may cause an allergic skin reaction.

Inhalation: May cause sensitisation. Irritating to respiratory system.

Chronic Exposure: ND

Chemical Listed As Carcinogen or Potential Carcinogen: No

See Toxicological Information (Section 11)

**Potential environmental effects**

See Ecological Information (Section 12)

### Section 3: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</th>
<th>%</th>
<th>OSHA PEL mg/m³</th>
<th>ACGIH TLV mg/m³</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glutaraldehyde, 8% EM grade (111-30-8) EC No.: 203-856-5</td>
<td>2.5-10%</td>
<td>NE</td>
<td>0.2 0.05ppm</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### Section 4: First Aid Measures

**If accidental overexposure is suspected**

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

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: Call for a doctor immediately.

**Note to physician**

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

### Section 5: Fire Fighting Measures

Flash Point: 71 °C

Flammable Limits: NE

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

Fire Extinguishing Media: CO₂, powder or water spray.

Special Fire Fighting Procedures: Fight larger fires with water spray or alcohol resistant foam. Wear respiratory protective device.

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

Hazardous combustion products: No dangerous decomposition products known.

DOT Class: Corrosive.

### Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water. Absorb with liquid-binding material (sand, diatomite, acid binders, universal...
Section 7: Handling and Storage
Precautions to be taken in Handling and Storage:
No special handling requirements for storage.
Storage Temperature: 0-5°C recommended for long term storage. Do not freeze.
Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection
Engineering Controls
Ventilation required: Ensure adequate ventilation.

Ingredients with limit values that require monitoring the workplace:
Glutaraldehyde (111-30-8)
- WEL Short-term value: 0.2 mg/m³, 0.05 ppm
- Long-term value: 0.2 mg/m³, 0.05 ppm

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 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 respiratory protective device that is independent of circulating air.
Protective gloves: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Skin protection: Wear suitable protective clothing
Eye protection: Tightly sealed goggles
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: Transparent liquid
Odor (threshold): Fruit like (ND)
Specific Gravity (H₂O=1): 1.00295 g/cm³
Vapor Pressure (mm Hg): 23 hPa
Vapor Density (air=1): ND
Percent Volatile by volume: ND
Evaporation Rate (butyl acetate=1): ND
Boiling Point: 101 °C
Freezing point / melting point: ND
pH: ND
Solubility in Water: Fully miscible.
Molecular Weight: ND
Solvent content: Organic solvents: 0.0 %, Water: 92.0 %

Section 10: Stability and Reactivity
Stability: Stable under normal storage conditions.
Conditions to Avoid: No decomposition if used according to specifications.
Section 11: Toxicological Information
Results of component toxicity test performed:
Acute toxicity:
LD/LC50 values relevant for classification: 111-30-8 Glutaraldehyde
   Oral LD50 134 mg/kg (rat)
   Dermal LD50 2560 mg/kg (rabbit)
Primary irritant effect:
   On the skin: Irritant to skin and mucous membranes.
   On the eye: Irritating effect.
Sensitization:
   Sensitization possible through inhalation.
   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.
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
   Harmful
   Irritant

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 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Chemical Fate Information: ND

Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification: ND
Must not be disposed of with household garbage. Do not allow product to reach sewer 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: Corrosive liquid, n.o.s. (Glutaraldehyde 8%)
   Hazard Class: 8
   Packaging group: II
   UN Number: UN1760
IATA: Proper shipping name: Corrosive liquid, n.o.s. (Glutaraldehyde 8%)
   Hazard Class: 8
   Packaging group: II
   UN Number: UN1760
Marine Pollutant: No
Section 15: Regulatory Information

United States Federal Regulations
SARA: Section 355 (extremely hazardous substances): None of the ingredients is listed.
Section 313 (Specific toxic chemical listings): None of the ingredients is listed.
SARA Title III: SARA 302 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard
RCRA: ND
TSCA: All ingredients are listed.
CERCLA: None of the ingredients is listed.

State Regulations
California Proposition 65:
Chemicals known to cause cancer:
None of the ingredients is listed.
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.

International Regulations
Canada WHMIS: ND
Europe EINECS Numbers: See Section 3.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16: Other Information
Label Information: See Section 2.
European Risk and Safety Phrases: See Section 2.
European symbols needed: X Harmful.
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
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