Section 1: Product and Company Identification

Product Name: Paraformaldehyde, EM Grade, Prill Purified
Synonym: Paraform, paraform polyoxymethylene, polyoxymethylene glycols.

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
Classification according to Regulation (EC) No 1272/2008

GHS Pictograms

GHS02 GHS08 GHS07

GHS Categories
GHS02 Flammable
   Flam. Sol. 2 H228: Flammable solid.
GHS08 Health
   Resp. Sens. 1 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
GHS07 Irritant
   Acute Tox. 4 H302: Harmful if swallowed.
   Skin Irrit. 2 H315: Causes skin irritation.
   Eye Irrit. 2 H319: Causes serious eye irritation.
   STOT SE 3 H335: May cause respiratory irritation.

2.2 Label elements
Labeling according to Regulation (EC) No 1272/2008
This product is classified and labeled according to the CLP regulation.

Hazard pictograms

GHS02 GHS07 GHS08

Signal Word: Danger
Hazard-determining components of labelling
Paraformaldehyde

**Hazard statements**
H228 Flammable solid.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.

**Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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**
Xn; Harmful
R20: Harmful by inhalation.
Xi; Irritant
R36/37/38: Irritating to eyes, respiratory system and skin.
Xn; Sensitizing
R42: May cause sensitisation by inhalation.

**Label elements**
Labeling according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
Code letter and hazard designation of product:
Xn Harmful
Hazard-determining components of labeling: Paraformaldehyde

**Risk phrases:**
20, Harmful by inhalation.
36/37/38, Irritating to eyes, respiratory system and skin.
42, May cause sensitisation by inhalation.

**Safety phrases:**
9, Keep container in a well-ventilated place.
22, Do not breathe dust.
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:**
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)

**Emergency overview**
Appearance: Solid colorless prill
Immediate effects: ND

**Potential health effects**
Primary Routes of entry: Inhalation, Ingestion, skin and eye contact.
Signs and Symptoms of Overexposure: ND
Eyes: Causes serious eye irritation.
Skin: Causes skin irritation.
Ingestion: Harmful if swallowed.
Inhalation: May cause respiratory irritation.
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)

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**Section 3: Composition / Information on Ingredients**

<table>
<thead>
<tr>
<th>Principle Hazardous Component(s)</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>Paraformaldehyde (30525-89-4)</td>
<td>≤100</td>
<td>NE</td>
<td>NE</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**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. If symptoms persist, consult a doctor.
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 a doctor immediately.

**Note to physician**
Information for doctor: Most important symptoms and effects, both acute and delayed: No further relevant information available.
Indication of any immediate medical attention and special treatment needed: No further relevant information available.
Treatment: ND
Medical Conditions generally Aggravated by Exposure: ND

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**Section 5: Fire Fighting Measures**
Flash Point: 70 °C
Flammable Limits: Lower: 7 Vol % Upper: 73 Vol %.
Ignition temperature: 300 °C
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.
Advice for firefighter: Use protective equipment: Mouth respiratory protective device.
Special Fire Fighting Procedures: No further relevant information available.
Unusual Fire and Explosion Hazards: Product does not present an explosion hazard.
Hazardous combustion products: Oxides of carbon.
DOT Class: Flammable solid.

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**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. Ensure adequate ventilation.
Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

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**Section 7: Handling and Storage**
Precautions to be taken in Handling and Storage: Thorough de-dusting. Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust. Keep container tightly sealed. Protect from heat and direct sunlight.
Storage temperature: Room temperature.
Storage Pressure: NA

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**Section 8: Exposure Controls / Personal Protection**
Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Engineering Controls**
Ventilation required: Use in well ventilated work area.

**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 self-contained respiratory protective device.
Protective gloves: Wear protective gloves.
Skin protection: Wear gloves and protective clothing as required.
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: Solid colorless prill.
Odor (threshold): Pungent (ND)
Specific Gravity (H₂O=1): 1.235 g/cm³
Vapor Pressure (mm Hg): ND
Vapor Density (air=1): NA
Percent Volatile by volume: ND
Evaporation Rate (butyl acetate=1): NA
Boiling Point: ND
Melting point: 120 °C
pH: 3.5
Solubility in Water: Insoluble.
Solids content: 86.3 %
Solvent content: Organic solvents: 0.0 %, Water: 3.0 %
VOC (EC) 0.00 %
Molecular Weight: 30.03 g/mol

Section 10: Stability and Reactivity
Stability: Stable under recommended storage conditions.
Conditions to Avoid: Exposure to moisture. Heat, flames and sparks. Extremes of temperature and direct sunlight.
Materials to Avoid (Incompatibility): Brass, Steel (all types and surface treatments), Copper, Acid anhydrides, Strong oxidizing agents, Strong reducing agents
Hazardous Decomposition Products: No dangerous decomposition products known.
Hazardous Polymerization: No dangerous reactions known.

Section 11: Toxicological Information
Results of component toxicity test performed:
Acute toxicity:
LD/LC50 values relevant for classification: 30525-89-4 Paraformaldehyde.
   Oral LD50     800 mg/kg (Rat)
   Dermal LD50   10000 mg/kg (rabbit)
   Inhalative LC50/4 h 1070 mg/l (Rat)
Primary irritant effect:
On the skin: Irritant to skin and mucous membranes.
On the eye: Irritating effect.
Sensitization: Sensitization possible through inhalation.
Additional toxicological information:
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.
Human experience:
Liver - Irregularities - Based on Human Evidence
Carcinogenic categories:
IARC (International Agency for Research on Cancer): None of the ingredients is listed.
NTP (National Toxicology Program): None of the ingredients is listed.
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.
This product does not contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

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 (German Regulation) (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 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: Paraformaldehyde
Hazard Class: 4
Packaging group: III
UN Number: UN2213
IATA: Proper shipping name: Paraformaldehyde
Hazard Class: 4
Packaging group: III
UN Number: UN2213
Marine Pollutant: No
Canadian TDG: Paraformaldehyde.

Section 15: Regulatory Information
United States Federal Regulations
SARA: 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: Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA Title III: No chemicals in this material are subject to the reporting requirements of, Section 302.
RCRA: ND
TSCA: All ingredients are listed
CERCLA: Paraformaldehyde: RQ = 1000 lbs (454 Kg).

State Regulations
California Proposition 65: Paraformaldehyde is not listed.
Formaldehyde (gas) may be present from dry heating decomposition.
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.
Chemicals known to cause developmental toxicity: None of the ingredients is listed.

International Regulations
Canada WHMIS: Canadian Domestic Substances List (DSL): All ingredients are listed.
Canadian Ingredient Disclosure list (limit 0.1%): None of the ingredients is listed.
Canadian Ingredient Disclosure list (limit 1%): 30525-89-4, Paraformaldehyde.
Europe EINECS Numbers: ND
Section 16: Other Information
Label Information: Flammable solid, Health Hazard, Irritant.
European Risk and Safety Phrases: See Section 2
European symbols needed: Xn Harmful
Canadian WHMIS Symbols:
B4 - Flammable solid.
D2A - Very 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.

SDS Form 0013F1V4