

Safety Data Sheet

Product No. 813-514, 813-515 Pelco® Slow Cure Hardener

Issue Date (09-30-15)

Review Date (08-31-17)

Section 1: Product and Company Identification

Product Name: Pelco® Slow Cure Hardener

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



GHS06

GHS05

GHS08

GHS09

GHS07

GHS Categories

GHS05 – Corrosive

Skin Corrosion/Irritation 1B

H314 Causes severe burns and eye damage.

Serious Eye Damage/Irritation 1

H318 Causes serious eye damage.

GHS06 – Toxic

Acute Toxicity, Oral 4

H303 Harmful if swallowed.

Acute Toxicity, Dermal 4

H312 Harmful in contact with skin.

Acute Toxicity, Inhalation 3

H331 Toxic if inhaled.

GHS07 – Irritant

Respiratory Sensitization 1

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sensitization 1

H317 May cause an allergic skin reaction.

GHS08 – Health hazard

Germ Cell Mutagenicity 2

H341 Suspected of causing genetic defects.

Reproductive Toxicity 2

H361 Suspected of damaging fertility or the unborn child.

STOT, Repeated Exposure 2

H373 May cause damage to central nervous system through prolonged or repeated exposure by skin absorption.

GHS09 – Environment

Aquatic Hazard, Acute 1

H400 Very toxic to aquatic life.

Aquatic Hazard, Long Term 1

H410 Very toxic to aquatic life with long-lasting effects.

Flammable Liquids 4

H227 Combustible liquid.

2.2 Label elements

Hazard Pictograms



Signal Word: DANGER

Hazard Statements

- H227 Combustible liquid.
- H303 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H331 Toxic if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H341 Suspected of causing genetic defects.
- H373 May cause damage to central nervous system through prolonged or repeated exposure by skin absorption.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long-lasting effects.

Precautionary Statements

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from flames and hot surfaces. No smoking.
- P260 Do not breathe mist, vapors or spray.
- P264 Wash exposed area with plenty of water and soap thoroughly after handling.
- P270 Do not eat, drink or smoke while using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed outside the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P281 Use personal protective equipment as required.
- P285 In case of inadequate ventilation, wear respiratory protection.
- P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a poison center or physician if you feel unwell.
- P303+P361+P353 IN ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340+P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P310 Immediately call poison center or doctor/physician.
- P331 Do not induce vomiting.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P370+P378 In case of fire: Use alcohol-resistant foam, dry chemical, or carbon dioxide for extinction.
- P391 Collect spillage.
- P403+P233+P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.
- P405 Store locked up.

P501 Dispose of contents/container to hazardous or special waste collection point in accordance with local/regional/national/international regulations.

2.3 Other hazards

Health Effects:

NFPA Hazard Rating: Health: 3; Fire: 1; Reactivity: 0

HMIS® Hazard Rating: Health: 3; Fire: 1; Physical hazard: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment: ND

Emergency overview

Appearance: Clear liquid or pigmented liquid.

Immediate effects: Corrosive epoxy hardener. Certain individuals may have pre-existing skin or respiratory conditions causing a sensitivity or allergy which manifest as various reactions. Heating or spraying this product or the mixed parts increases potential health hazards. Health and safety personnel should examine the handling procedures and remedy any existing or potential health and safety hazards.

Potential health effects

Primary Routes of entry: ND

Signs and Symptoms of Overexposure: Skin rash, irritation, reddening, or eczema; Breathing irritation or difficulty.

Eyes: Causes serious eye damage, including tearing, redness, swelling, burning and blindness.

Skin: Corrosive! Harmful in contact with skin. Contact may result in pain, severe local redness, burns and tissue damage. Prolonged contact may result in absorption of harmful amounts. A more severe response may be expected if skin is abraded.

Ingestion: Harmful if swallowed. May cause burns to the mouth, throat or stomach. Adverse symptoms may include abdominal pain, nausea and diarrhea.

Inhalation: Can cause severe eye, skin and respiratory system irritation. Adverse symptoms may include nausea, headache and difficulty breathing.

Chronic Exposure: Repeated exposure can cause irritation and sensitization, mutagenic effects, carcinogenicity, and reproductive toxicity. Also specific organ toxicity: Liver, kidney, endocrine system, central nervous system, respiratory system.

Nonylphenol, CAS #: 84852-15-3: Category 2 Estrogenic substance and endocrine disruptor. Has hormone-like effects in both wildlife and humans. Acts as an obesity enhancing chemical. Affect insulin signaling in the liver of experimental animals.

Confidential Component 1, CAS #: Trade Secret: Category 2; kidney and liver damage.

Chemical Listed As Carcinogen Or Potential Carcinogen: None \leq 0.1%

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 Carcinogen	IARC Carcinogen	OSHA regulated Carcinogen
Polyoxypropylenediamine (9046-10-0) EC No. 618-561-0	45- 100	NE	NE	No	No	No
1-(2-Aminoethyl) piperazine	10-20	NE	NE	No	No	No

(AEP) (140-31-8) EC No. 205-411-0						
Nonylphenol (84852-15-3) EC No. 284-325-5	10-20	NE	NE	No	No	No
Confidential component #1 (Trade Secret)	1-5	NE	NE	No	3	No
Confidential component #2 (Trade Secret)	1-5	NE	NE	No	No	No

Section 4: First Aid Measures

If accidental overexposure is suspected

Eye(s) Contact: Immediate medical attention required. Chemical burns must be treated promptly by a physician or ophthalmologist. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing for at least 15 minutes. Do not rub eyes in order to prevent corneal injury.

Skin Contact: Immediate medical attention required. Chemical burns must be treated promptly by a physician or dermatologist. Wash material off of the skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes immediately and wash them before reuse. For severe exposures, immediately get under safety shower and begin rinsing.

Inhalation: Immediate medical attention required. Remove victim to fresh air and keep at rest in a comfortable position for breathing. If not breathing, provide artificial respiration. If unconscious, place in recovery position and maintain an open airway.

Ingestion: Immediate medical attention required. Remove victim to fresh air and keep at rest in a comfortable position for breathing. If the exposed person is conscious, rinse mouth with water and then give plenty of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Do not induce vomiting unless directed to do so by medical personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Note to physician

Treatment: Specific antidotes or neutralizers do not exist. Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient. Symptoms of poisoning may even occur after several hours. Recommended medical monitoring for at least 48 hours.

Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed.

Skin: This product contains a component that is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn.

Ingestion: Inducing vomiting can be contraindicated because of the irritating nature of the chemical.

Medical Conditions generally Aggravated by Exposure: Liver, kidney, endocrine system, respiratory and skin disorders, if product is handled without adequate protection.

Section 5: Fire Fighting Measures

Flash Point: ND

Flammable Limits: ND

Auto-ignition point: ND

Fire Extinguishing Media: Alcohol-resistant foam, dry chemical or carbon dioxide fire extinguishers. Do not use direct water stream.

Special Fire Fighting Procedures: Wear NIOSH or OSHA approved self-contained breathing apparatus in positive pressure mode with full face piece and full protective gear. Isolate the scene by removing all persons from the incident area. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container.

Unusual Fire and Explosion Hazards: If heated above its flash point, product will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to ignition source. Mists or sprays may be flammable below normal flash point. Keep away from extreme heat or open flame. Fire in vicinity poses risk of pressure build-up and rupture. Containers at risk from fire should be cooled with water and, if possible, removed from the danger area.

Note: Contains 1-(2-Aminoethyl) piperazine (AEP), CAS #140-31-8: Combustible Liquid, Class IIIA (Flash point 140-200°F) per OSHA 29 CFR 1910.106; Flammable Liquid, Category 4 per GHS.

Hazardous combustion products: carbon dioxide, carbon monoxide, nitrogen oxides, amines, hydrogen cyanide, lower molecular weight organic molecules.

DOT Class: Corrosive.

Section 6: Accidental Release Measures

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

Personal precautions, protective equipment and emergency procedures: Keep unnecessary and unprotected personnel from entering. Ensure adequate ventilation. Do not breathe vapors or mist during cleanup. Use protective equipment (see Section 8).

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Inform relevant authorities if the product has caused environmental pollution. Water-polluting material.

Hazardous to the environment.

Methods and materials for containment and cleanup: Isolate spill area. Keep out of sewer and storm drains. Absorb spill with non-combustible materials and scoop up. Clean up spill residues with soap and water.

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:

Handling Protect chemical from atmospheric moisture. Avoid prolonged exposure to heat and air. Keep away from sources of ignition. Do not reseal if contamination is suspected.

Storage Store in original or approved alternative containers. Protect from sunlight in a dry, cool, well-ventilated area, away from incompatible materials. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Protect against physical damage and moisture. Keep away from heat, sparks, and flame. Do not cut, drill, grind, weld or perform similar operations on or near containers. Use appropriate containment to avoid environmental contamination.

Storage temperature: 18-27 °C (65-80 °F)

Storage Pressure: ND

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Good local and general ventilation should be sufficient to control worker exposure to airborne contaminants below recommended exposure limits. Local exhaust may be required in some areas.

Personal Protection Equipment

Respiratory protection: When ventilation is inadequate, use either an atmosphere-supplying respirator or NIOSH or OSHA approved air-purifying respirator for organic vapors.

Protective gloves: Use impervious gloves.
 Skin protection: Cover body with appropriate protective clothing depending on the task being performed.
 Eye protection: Wear safety goggles, or use full face shield when there is a greater risk of splash.
 Do not wear contact lenses.

Additional clothing and/or equipment: Emergency eyewash fountains and safety showers.

Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Clear or pigmented liquid.

Odor (threshold): Irritating, ammonia-like (ND)

Specific Gravity (H₂O=1): 0.95-1.00 g/cm³

Vapor Pressure (mm Hg): ND

Vapor Density (air=1): ND

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): ND

Boiling Point: ND

Freezing point / melting point: ND

pH: 11-13

Solubility in Water: ND

Section 10: Stability and Reactivity

Stability: Stable under normal conditions. Product is hygroscopic; contamination with moisture will negatively affect product performance.

Conditions to Avoid: Unintentional contact with moisture, excessive heat, open flame and sparks.

Materials to Avoid (Incompatibility): Strong oxidizing agents. Water, bases, acids, copper, aluminum, and zinc alloys.

Hazardous Decomposition Products: Depend upon temperature, air supply and presence of other materials. Can include, but not limited to, carbon dioxide, carbon monoxide, nitrogen oxides, amines, hydrogen cyanide, lower molecular weight organic molecules.

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Results of component toxicity test performed:

Components	Results
Polyoxypropylenediamine, CAS #: 9046-10-0	<p><u>Acute Toxicity</u> Oral LD50 (Rat): 2,000-5,000 mg/kg (OECD Test Guideline 401); May cause burns to mouth, throat and stomach. Dermal LD50 (Rabbit): 2,000-5,000 mg/kg(OECD Test Guideline 402); Causes severe burns. pain or irritation, redness, blistering. Inhalation LC50 (Rat), Vapor: >0.5-2.0 mg/L (OECD Test Guideline 403); May give off gas that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Skin corrosion/irritation (Rabbit): Corrosive (OECD Test Guideline 404) Serious eye damage/eye irritation (Rabbit): Corrosive (OECD Test Guideline 405). Causes serious eye damage. Pain, watering, redness STOT, SE: No data available Aspiration hazard: No data available</p> <p><u>Chronic Toxicity</u> Sensitization, skin and respiratory: No data available Germ cell mutagenicity: Not mutagenic in a standard battery of genetic</p>

	<p>toxicological tests. In vitro: Bacteria and Mammals Cells: Negative; In vivo: Mammals: Negative Carcinogenicity: No data available Reproductive toxicity (Rat, male/female): Negative (OECD Test Guideline 421) STOT, RE: (Rat, Male/Female), 90days:: sub-chronic NOAEL/Dermal: 250 mg/kg/d (OECD Test Guideline 411) 28days: sub-chronic NOAEL/Oral: 239 mg/kg/d (OECD Test Guideline 407)</p>
<p>1-(2-Aminoethyl) piperazine, (AEP), CAS #: 140-31-8</p>	<p><u>Acute Toxicity</u> Oral LD50 (Rabbit): 2,097 mg/kg (No official guidelines) Dermal LD50 (Rabbit): 866 mg/kg (No official guidelines) Ingestion Effects: Severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Inhalation Effects: Can cause severe eye, skin and respiratory tract burns. Inhalation of vapors and/or aerosols in high concentration may cause nose, throat and lung irritation. May cause irritation of respiratory system. Skin corrosion/irritation (Rabbit), 4hrs: Toxic in contact with skin. Causes skin burns. Severe skin irritation. Serious eye damage/eye irritation (Rabbit), 72hrs: Causes eye burns. May cause blindness. Severe eye irritation. STOT, single: No data available Aspiration hazard: No data available</p> <p><u>Chronic Toxicity</u> Sensitization, skin and respiratory (Guinea pig): May cause sensitization by skin contact. Germ cell mutagenicity: May be mutagenic, the data is inconclusive. Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, OSHA and ACGIH. STOT, RE: Sore throat. Eye disease. Skin disorders. Allergies. Asthma. Reproductive toxicity: (Rat, Male/Female): Maternal toxicity: Negative; Fertility: Negative; Developmental effects: Negative (OECD Test Guideline 422) STOT, RE: Prolonged contact may result in chemical burns and permanent damage., Repeated or prolonged contact causes sensitization, asthma and eczemas, eye disease, skin disorders, allergies and asthma. (Rat, Male/Female): Sub-acute NOAEL/Oral: 151 to 285 mg/kg/d (OECD Test Guideline 422); Sub-acute NOAEL/Dermal, 21/28-day: >1,000 mg/kg/d (OECD Test Guideline 410)</p>
<p>Nonylphenol CAS #: 84852-15-3</p>	<p><u>Acute Toxicity</u> Oral LD50 (Rat): 1,412 mg/kg Dermal LD50 (Rabbit): 2,031 mg/kg Inhalation LC50 (Rat): No data available Skin corrosion/irritation (Rabbit), 4hrs: Causes burns (OECD Test Guideline 404) Serious eye damage/eye irritation (Rabbit), 72hrs: Corrosive (OECD Test Guideline 405) STOT, SE: No data available Aspiration hazard: No data available</p> <p><u>Chronic Toxicity</u> Sensitization, skin and respiratory (Guinea pig): Not sensitizing (Guinea pig maximization test) (OECD Test Guideline 406) STOT, RE: Estrogenic substance and endocrine disruptor. Has hormone-like effects in both wildlife and humans. Acts as an obesity enhancing chemical. Affect insulin signaling in the liver of adult male rats. Central nervous system by skin absorption; Category 2 Germ cell mutagenicity: Not genotoxic Carcinogenicity: No component of this product present at levels greater than</p>

	<p>or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, OSHA and ACGIH.</p> <p>Reproductive toxicity: The results of animal studies suggest a fertility impairing effect. Rat, Oral / Effects on newborn: growth statistics (e.g., reduced weight gain). Suspected human reproductive toxicant.</p>
<p>Confidential Component 1, CAS #: Trade Secret</p>	<p><u>Acute Toxicity</u> Oral LD50 (Rat): >5,000 mg/kg mg/kg (OECD Test Guideline 401) Dermal LD50 (Rabbit): >2,000 mg/kg mg/kg (OECD Test Guideline 402) Inhalation LC50 (Rat): No data available Skin corrosion/irritation (Rabbit): Non-irritant (OECD Test Guideline 404) Serious eye damage/eye irritation (Rabbit): Non-irritant. (OECD Test Guideline 405) STOT, SE: No data available Aspiration hazard: No data available</p> <p><u>Chronic Toxicity</u> Sensitization, skin and respiratory: Not skin sensitizing (OECD Test Guideline 406, Guinea pig maximization test) Germ cell mutagenicity: Negative results In vitro tests in Bacteria and Mammals Carcinogenicity: (Rat, male, female) 103 weeks/5 days per week: NOAEL/Dermal: 250 mg/kg: Negative (OECD Test Guideline 451) IARC: Group 3 Reproductive toxicity: (Rat, Male/Female): Maternal toxicity: Negative; Fertility: Positive; Developmental effects: Negative (OECD Test Guideline 421) STOT, RE: kidneys and liver; Category 2 (Rat, Male/Female), 90days: sub-chronic NOAEL/Oral: >1,000 mg/kg/day (OECD Test Guideline 408) 90days: sub-chronic NOAEL/Dermal: 125 to 500 mg/Kg (OECD Test Guideline 411) 28 or 14days, sub-acute NOEC/ Inhalation, dusts and mists: 500 mg/ m³ (OECD Test Guideline 412)</p>
<p>Confidential Component 2, CAS #: Trade Secret</p>	<p><u>Acute Toxicity</u> Oral LD50 (Rat): 2,000-5,000 mg/kg mg/kg (OECD Test Guideline 401) Dermal LD50 (Rabbit): >5,000 mg/kg mg/kg (OECD Test Guideline 402) Inhalation LC50 (Mammals, unspecified): Severe Respiratory irritant Skin corrosion/irritation (Rabbit): Corrosive (OECD Test Guideline 404) Serious eye damage/eye irritation (Mammals, unspecified): Corrosive (No official guidelines) STOT, SE: No data available Aspiration hazard: No data available</p> <p><u>Chronic Toxicity</u> Sensitization, skin and respiratory: Respiratory Sensitizer in Humans; Skin Sensitizer in Humans and Guinea pig (No official guidelines) Germ cell mutagenicity: various In vitro and In vivo tests: negative and positive results Carcinogenicity: No data available Reproductive toxicity (Rat, Male/Female): Maternal toxicity: Positive; Fertility: Positive (OECD 416, Two Generation Reproduction Toxicity Study) STOT, RE: (Human), Sub-acute LOAEL/Oral: 30 mg/kg/d (No official guidelines) (Rat, Male/Female), Sub-chronic NOAEL/Oral: 627 mg/kg/d (No official guidelines)</p>

Human experience:

- Respiratory and skin sensitizer: contains components reported to be a respiratory and skin sensitizer: 1-(2-Aminoethyl) piperazine, (AEP), CAS #: 140-31-8: skin sensitizer
- Confidential Component 2, CAS #: Trade Secret: skin and respiratory sensitizer.
- Germ cell mutagenicity: contains components suspected to have a mutagenic effect:

Confidential Component 1, CAS #: Trade Secret

Reproductive toxicity: contains components reported to be suspected human reproductive toxicants:

Nonylphenol, CAS #: 84852-15-3: effects on newborn

Confidential Component 1, CAS #: Trade Secret

Specific organ toxicity, repeated exposure: liver, kidney, endocrine system, central nervous system, respiratory system:

Nonylphenol, CAS #: 84852-15-3: Category 2 Estrogenic substance and endocrine disruptor. Has hormone-like effects in both wildlife and humans. Acts as an obesity enhancing chemical. Affect insulin signaling in the liver of experimental animals.

Confidential Component 1, CAS #: Trade Secret: Category 2; kidney and liver damage.

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:

Ecotoxicity: Acutely and chronically hazardous for aquatic organisms.

Bioaccumulative potential: Low, except for Nonylphenol.

Other adverse effects: Very toxic to aquatic life with long lasting effects. Do not allow product to reach ground water, water course or sewage system. Presents danger to drinking water if even small quantities leak into the ground.

Ecotoxicity test results

Components	Test Results
Polyoxypropylenediamine, CAS #: 9046-10-0	<p>Aquatic toxicity: An environmental hazard. Toxic to aquatic life with long lasting effects.</p> <p><u>Acute Toxicity:</u> Fish, 96hrs: EC50: 10-100 mg/L (OECD 203, semi- static); 96hrs: >750 mg/L (OECD Test Guideline 203, static) Aquatic invertebrates (Daphnia magna), 48hrs: EC50: 10-100 mg/L (OECD Test Guideline 202, Immobilization test, static) Aquatic plants (green algae), 72hrs: ErC50: 10-100 mg/L (OECD Test Guideline 201, Growth Inhibition Test)</p> <p><u>Chronic Toxicity:</u> Bacteria, 3hrs: EC50: 750 mg/L (OECD 208, Seedling Emergence and Seedling Growth Test, Static) Aquatic plants (Algae), 72 hours: NOEC: ≤1 mg/L (OECD Test Guideline 201, Growth Inhibition Test, Static) 72 hours: NOECb: 100 mg/L (ISO 10253:2006, Marine algal growth inhibition test , Static) Activated Sludge (Bacteria), 3hrs: NOEC 310 mg/L (OECD Test Guideline 209, Respiration Inhibition Test, Static)</p> <p><u>Ecological Data:</u> Persistence and degradability: Not readily biodegradable; 0% in 28 days (OECD Test Guideline 301B) Aquatic half-life: Fresh water 360 days; Photolysis: 0.02 to 0.03 days Bioaccumulative potential : low; LogPow: 1.34; Mobility in soil: Not available.</p>
1-(2-Aminoethyl) piperazine, (AEP), CAS #: 140-31-8	<p><u>Acute Toxicity:</u> Fish, 96hrs: LC50: 2,190 mg/L (Static) Aquatic plants (Algae), 72hrs: EC50: >1,000 mg/L (OECD 201, Growth Inhibition Test) Aquatic invertebrates (Daphnia magna), 48hrs: EC50: 10-100 mg/L (OECD 202, Immobilization Test, Static)</p> <p><u>Chronic Toxicity:</u> (Bacteria), 2hrs: EC10: 250 mg/L (No official guidelines) (Bacteria), 1hr: EC20: 1,600 mg/L (Static) Activated sludge microorganisms (Bacteria), 2hrs: EC50: 511 mg/L (ISO ISO 9509:2006, Toxicity test for assessing the inhibition of nitrification, Static)</p> <p><u>Ecological Data:</u> Persistence and degradability: Not readily biodegradable; 0% in 28 days</p>

	(OECD 301F, Manometric Respirometry Test) Photolysis: 0.08 days: 50% Bioaccumulative potential: low; LogPow: -1.48 Mobility in soil: Not available.
Nonylphenol CAS #: 84852-15-3	<u>Aquatic toxicity</u> An environmental hazard. Very toxic to aquatic life with long lasting effects. <u>Acute Toxicity</u> Fish (fathead minnow), 96hrs: LC50: 0.209 mg/L Aquatic invertebrates (Daphnia magna), 48hrs: EC50: 0.0844 mg/L Aquatic plants (green algae), 72hrs: EC50: 0.33 mg/L <u>Ecological Data</u> Biodegradability (aerobic), 28days: 62% BOD: Readily biodegradable (OECD Test Guideline 301F) Remarks: The 10 day time window criterion is not fulfilled. Bioaccumulative potential (fathead minnow), 28days: high; Bioconcentration factor (BCF): 740 Mobility in soil: low.
Confidential Component 1, CAS #: Trade Secret	<u>Acute Toxicity:</u> Fish, 96hrs: LC50: >10,000 mg/L (No official guidelines) Aquatic plants (Algae), 72hrs: ErC50: >100 mg/L (DIN 38412 part 9, static, growth rate) Activated Sludge (Bacteria), 3hrs: EC50: >1,000 mg/L (OECD Test Guideline 209, Respiration Inhibition Test, Static) <u>Chronic Toxicity:</u> Aquatic invertebrates (Daphnia magna), 21days: NOEC: <15 mg/L (No official guidelines, semi-static) Aquatic plants (Algae), 72hrs: LOAEL: <25 mg/L (DIN 38412 part 9, static) <u>Ecological Data:</u> Persistence and degradability: Readily biodegradable; 100% in 5 days. Bioaccumulative potential: low; LogPow: -2.3; BCF: <3.9 Mobility in soil: Not available.
Confidential Component 2, CAS #: Trade Secret	<u>Acute Toxicity:</u> Fish, 96hrs: LC50: 1,500-2,000 mg/L (EU EC C.1, Semi-static) Aquatic invertebrates (Daphnia magna), 48 hours: EC50: 10-100 mg/L (EU EC C.2, Static) <u>Chronic Toxicity:</u> Bacteria, 30minutes: NOEC: <500 mg/L (No official guidelines, Static) Aquatic invertebrates (Daphnia magna), 21 days: NOEC: <10 mg/L (OECD 211, Reproduction Test, Semi-static) Aquatic plants (Algae), 72hrs: NOECr: >1,000 mg/L (OECD 201, Static, Growth Inhibition Test) <u>Ecological Data:</u> Persistence and degradability: Readily biodegradable; 70 % in 28 days (OECD 301F, Manometric Respirometry Test) Photolysis, 0.1 day: 50%; Bioaccumulative potential: low; LogPow: -1.24; BCF: 3.9 Mobility in soil: Not available.

Chemical Fate Information:

Persistence and biodegradability: Mixture consists of biodegradable and non-biodegradable components.

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: None

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: Amines, liquid, corrosive, n.o.s., (contains Polyoxypropyleneamines)

Hazard Class: 8

Packaging group: III

UN Number: UN2735

IATA: Proper shipping name: Amines, liquid, corrosive, n.o.s., (contains Polyoxypropyleneamines)

Hazard Class: 8

Packaging group: III

UN Number: UN2735

Limitations: Passenger and cargo aircraft: 5L; packaging instructions 852. Cargo aircraft only: 60L; packaging instructions 856.

IMO: Proper shipping name: Amines, liquid, corrosive, n.o.s., (contains Polyoxypropyleneamines)

Hazard Class: 8

Packaging group: III

UN Number: UN2735

Marine Pollutant: Yes

Canadian TDG: Amines, liquid, corrosive, n.o.s., (contains Polyoxypropyleneamines)

Section 15: Regulatory Information

United States Federal Regulations

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

SARA: ND

SARA Title III: Section 311 and 312, Immediate Health Hazard. Section 313, Chemicals above de minimis level: None

RCRA: ND

TSCA: All components are listed or exempt.

CERCLA: No components are subject to reporting. The following are subject to reporting if the RQ of 100 lbs. is met:

Propylene oxide, CAS# 75-56-9

Diethanolamine, CAS# 111-42-2

State Regulations

California Proposition 65: This product contains trace amounts of chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Propylene oxide, CAS #: 75-56-9: causes cancer; Date listed: October 1, 1988

Diethanolamine, CAS #: 111-42-2: causes cancer; Date listed: June 22, 2012

International Regulations

Canada WHMIS: Class D Division 2A, Class D Division 2B, Class E Corrosive

Europe EINECS Numbers: See section 3

Section 16: Other Information

Label Information: See section 2

European Risk and Safety Phrases: ND

European symbols needed: ND

Canadian WHMIS Symbols:



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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