

**Safety Data Sheet**

**Product No. 813-521 PELCO® Acrylimet Hardener**

**Issue Date (12-08-17)**

**Review Date (10-15-18)**

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**Section 1: Product and Company Identification**

**Product Name: PELCO® Acrylimet 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**

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**Section 2: Hazard Identification**

GHS Categories:

Flammable liquids	Category 3
Skin corrosion / irritation	Category 2
Skin sensitization	Category 1B
Serious eye damage / eye irritation	Category 2A
STOT – single exposure	Category 3
Hazardous to the aquatic environment – Chronic hazard	Category 2

GHS label elements:

GHS Pictograms:



Flammable    Environ Damaging    Irritant

**SIGNAL WORD: Warning**

**Hazard statements:**

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary Statements – Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly with soap and water after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

**Precautionary Statements – Response:**

P302+P352 IF ON SKIN: Wash with plenty of water and soap.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P333+P313 If skin irritation or rash occurs, get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use alcohol-resistant foam, carbon dioxide or dry sand for extinction.

**Precautionary Statements – Storage**

P235 Keep cool.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

**Precautionary Statements – Disposal:** Dispose of contents/container to hazardous waste in accordance with local, state or national legislation. Incinerate under approved controlled conditions, using incinerators suitable for the disposal of flammable organics.

**Health Effects:**

NPCA – HMIS Hazard Rating: Health: 2; Fire: 2; Reactivity: 2  
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment: None

PBT: NE

vPvB: NE

**Emergency overview**

Appearance: Clear to slightly tinted

Physical state: Liquid

Odor: Characteristic

Immediate effects: ND

**Potential health effects**

Primary Routes of entry: Ingestion, skin.

Signs and Symptoms of Overexposure: ND

Eyes: Causes serious eye irritation.

Skin: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.

Inhalation: May cause respiratory irritation.

Chronic Exposure: See Section 11

Chemical Listed As Carcinogen Or Potential Carcinogen:

See Toxicological Information (Section 11)

**Potential environmental effects**

See Ecological Information (Section 12)

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

<b>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</b>	<b>%</b>	<b>OSHA PEL mg/m3</b>	<b>ACGIH TLV mg/m3</b>	<b>NTP</b>	<b>IARC</b>	<b>OSHA regulated</b>
Iso-Butyl methacrylate (97-86-9) EC-No. : 202-613-0	<90	NE	NE	No	No	No
Trimethylolpropane Trimethacrylate (3290-92-4) EC-No. : 221-950-4	<20	ND	TWA 1.000000 mg/m3	No	No	No

Impurities and stabilizing additives Standard grades contain inhibitors from among the following: 1000 ppm

Maximum: p-Methoxyphenol (CAS No. 150-76-5)

Company Standard TWA: 50 PPM

Company Standard established STEL: 100 ppm

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**Section 4: First Aid Measures****If accidental overexposure is suspected**

Eye(s) Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get Medical advice/attention

Skin Contact: IF ON SKIN (or hair): Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing wash before reuse.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion: Do not induce vomiting. Rinse mouth. Obtain immediate medical attention.

**Note to physician**

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

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**Section 5: Fire Fighting Measures**

Flash Point: 49°C (Closed cup)

Flammable Limits: Upper flammability limit 8 %, Lower flammability limit 2 %

Auto-ignition point: 296°C

Fire Extinguishing Media: Water spray, foam, dry powder or CO<sub>2</sub>

Special Fire Fighting Procedures: A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

Unusual Fire and Explosion Hazards: Sealed containers rupture explosively if hot.

Hazardous combustion products: Carbon oxides

DOT Class: Flammable liquid

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**Section 6: Accidental Release Measures**

Steps to be Taken in Case Material is Released or Spilled: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Wear protective gloves and eye/face protection. Avoid breathing vapors. Avoid release to the environment. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body. Collect spillage. Do not adsorb onto sawdust or other combustible materials. Transfer to a container for disposal or recovery. Use only non-sparking tools.

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: Do not eat, drink or smoke at the work place. Wash thoroughly after handling. Avoid breathing vapors. Use only outdoors or in a well-ventilated area. The vapor is heavier than air; beware of pits and confined spaces. Ground container and receiving equipment. Use explosion proof electrical equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Storage Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Keep away from heat, sparks, open flame, hot surfaces – No smoking. Protect from sunlight.

IMPORTANT: Methacrylates stored in bulk must be kept in contact with air (oxygen).

Monomer vapors are uninhibited and may form polymers in vent or flame arresters, resulting in blockage of vents. Check inhibitor levels every 6 months and return to original level.

Incompatible materials Polymerization catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidizing agents.

May polymerize on heating. Sealed containers rupture explosively if hot.

Storage temperature: Room Temperature

Storage Pressure: NA

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## Section 8: Exposure Controls / Personal Protection

### Engineering Controls

Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required. The following information is given as general guidance.

Ventilation required: Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded.

### Personal Protection Equipment

Respiratory protection: Wear respiratory protection. Wear suitable respiratory equipment if exposure to levels above the occupational exposure limit is likely. A suitable mask with filter type A may be appropriate. In the event of formation of particularly high levels of vapor, a self-contained breathing apparatus may be appropriate.

Protective gloves: Wear protective gloves. For splash protection: Butyl; EN 374. For immersion protection: Butyl; 0.7mm or greater; EN 374. Suitability of gloves should be confirmed with glove manufacturer. Change gloves if contamination occurs or duration of activity exceeds breakthrough time. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Skin protection: Wear protective clothing as required

Eye protection: Wear eye/face protection. Safety spectacles/goggles/full face shield.

Additional clothing and/or equipment: ND

### Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

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## Section 9 Physical and Chemical Properties

Appearance and Physical State: Clear to slightly tinted Liquid.

Odor (threshold): Characteristic ( 0.015-0.06)

Specific Gravity (H<sub>2</sub>O=1): 0.901

Vapor Pressure (mm Hg): 210mm Hg @ 20°C

Vapor Density (air=1): 4.91

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): ND

Boiling Point: 155°C

Freezing point / melting point: -35°C

pH: NA

Solubility in Water: 0.47 g/l @ 20°C

Solubility in other solvents: Miscible with most organic solvents

Molecular Weight: NA

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### Section 10: Stability and Reactivity

Stability: Reactivity; Will exothermically polymerize in the presence of initiators. Chemical stability; Stable in the presence of inhibitor.

Conditions to Avoid: Heat and direct sunlight.

Materials to Avoid (Incompatibility): Polymerization catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidizing agents.

Hazardous Decomposition Products: Does not decompose up to auto-ignition temperature.

Hazardous Polymerization: Susceptible to polymerization initiated by prolonged heating or the presence of catalyst.

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### Section 11: Toxicological Information

Results of component toxicity test performed:

Acute toxicity: Ingestion Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.

Ingestion toxicity data: LD50 (oral) > 9590 mg/Kg

Ingestion STOT – single exposure Not applicable.

Inhalation: May cause respiratory irritation. May cause drowsiness and dizziness. Harmful if inhaled.

Inhalation toxicity data: LC50 (vapor) 5026 ppm (29.74 mg/l) (290 min)

Inhalation STOT – single exposure: Not applicable.

Respiratory sensitization data: Not a respiratory sensitizer.

Aspiration hazard data: Not an aspiration hazard.

Skin contact: May cause an allergic skin reaction. Causes skin irritation. Repeated and/or prolonged contact may cause dermatitis.

Skin contact toxicity data: LD50 (dermal) > 17760 mg/Kg

Skin contact STOT – single exposure: Not applicable.

Skin sensitization data: Evidence of contact sensitization in man.

Eye contact: Causes severe eye irritation.

Eye contact toxicity data: Slight irritant to rabbit eyes.

Eye STOT – single exposure Not applicable.

Germ cell mutagenicity data: Salmonella typhimurium (TA 1535, 1537, 98, 100) negative (OECD 471)

Repeated exposure toxicity: Chronic exposure Exposure to high concentrations may produce adverse effects on the nasal epithelium. Repeated exposure produces adverse effects on the spleen.

STOT – repeated exposure data: NOAEL (inhalation) (rat) (28 day) 310 ppm (OECD 412)

LOAEL (inhalation) (rat) (28 day) 952 ppm (OECD 412) NOAEC (oral) (rat) 30 mg/kg/day

Reproductive toxicity data: Some evidence of developmental toxicity at 1000 mg/kg/day in screening study (OECD 422). Decreased number of neonates, decreases in parturition and live birth indices and total number of offspring. NOEL for developmental toxicity is considered 300 mg/kg/day.

Carcinogenicity data: It is unlikely to present a carcinogenic hazard to man.

Other information Not applicable.

Human experience: See Acute toxicity above.

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

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### Section 12: Ecological Information

Ecological Information:

Ecotoxicity:

Toxic to aquatic life with long lasting effects.

LC50 (rainbow trout) (96 hour) (flow through) 20 mg/l

EC50 (Daphnia magna) (48 hour) > 29 mg/l

EC50 (Selenastrum capricornutum) (72 hour) 16 mg/l

EC50 (Selenastrum capricornutum) (72 hour) 44 mg/l

This product is substantially removed in biological treatment processes.  
Persistence and degradability Readily biodegradable 74% (28 days)  
Bioaccumulation: The product has moderate potential for bioaccumulation.  
Mobility: The product is predicted to have moderate mobility in soil.  
Other adverse effects: None known  
Chemical Fate Information: ND

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### **Section 13 Disposal Considerations**

RCRA 40 CFR 261 Classification: ND

Avoid release to the environment. Dispose of all empty containers in accordance with local and national government regulations.

For U.S. - Dispose of in accordance with federal, state and local regulations. When discarded, it is considered a hazardous waste by the EPA under RCRA. The reportable quantity for methyl methacrylate is 1000 lb. (40 CFR Part 302). Add excess inhibitor before disposing.

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

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### **Section 14: Transportation Information**

US DOT Information: Proper shipping name: Flammable liquid, n.o.s. (Isobutyl methacrylate / Trimethylolpropane trimethacrylate solution)

Hazard Class: 3

Packaging group: III

UN Number: UN1993

IATA: Proper shipping name: Flammable liquid, n.o.s. (Isobutyl methacrylate / Trimethylolpropane trimethacrylate solution)

Hazard Class: 3

Packing group: III

UN Number: UN1993

Domestic shipments only: NA

IMO: Proper shipping name: Flammable liquid, n.o.s. (Isobutyl methacrylate / Trimethylolpropane trimethacrylate solution)

Class: 3

UN Number: UN1993

Packing group: III

Marine Pollutant: Yes

Canadian TDG: Flammable liquid, n.o.s. (Isobutyl methacrylate / Trimethylolpropane trimethacrylate solution)

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### **Section 15: Regulatory Information**

#### **United States Federal Regulations**

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

SARA: 302 Extremely Hazardous: Not listed Substances

SARA Title III: 311/312 Hazard Categories Acute: Yes, Chronic: No, Fire ; Yes, Reactivity : Yes, Pressure: No  
RCRA: ND

TSCA: All component are listed

CERCLA: The reportable quantity for methyl methacrylate is 1000 lb. (40 CFR Part 302).

#### **State Regulations**

California Proposition 65: None listed.

#### **International Regulations**

European Union: To the best of our knowledge all chemicals in this product comply with REACH regulations.

Canada WHMIS: WHMIS Classification

Class B, Division 3, Combustible Liquid

Class D, Division 2, Subdivision B, Toxic Material

## Class F, Dangerously Reactive Material

Canada (DSL/NDSL):	Listed
Japan (ENCS):	Listed
Philippines (PICCS):	Listed
Australia (AICS):	Listed
South Korea (KECI):	Listed
China (IECSC):	Listed

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### **Section 16: Other Information**

Label Information: See section 2

European Risk and Safety Phrases: ND

European symbols needed: ND

Canadian WHMIS Symbols: ND

#### **Abbreviations used in this document**

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

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### **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.