

SAFETY DATA SHEET

Product No. 894-30 to 894-39 PELCO® Alcohol-based Diamond Suspension, Monocrystalline, 1L
0.1, 0.25, 0.5, 1, 3, 6, 9, 15, 30, 45 µm

Issue Date (11-08-2022)

Review Date (11-08-2022)

Section 1: Product and Company Identification

Product Name: PELCO® Alcohol-based Diamond Suspension, Monocrystalline

Synonym: Alcohol Mono-diamond Suspension

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 Classification:

Hazardous

Physical Hazards:

Flammable Liquid Category 2 – H225

Health Hazards:

Acute Toxicity Category 4 – H302

Eye Irritant Category 2 – H319

Aspiration Toxicity Category 4 – H332

Specific Target Organ Toxicity – Single Exposure Category 1 – H370

IDLH (Immediate Danger to Life and Health): None

2.2 Label elements



GHS-02
Flammable



GHS-07
Acute Toxicity



GHS-08
Aspiration Hazard

Signal Word:

DANGER

Hazard Statement(s):

H225: Highly Flammable Liquid and Vapor

H302: Harmful if swallowed

H319: Causes serious eye irritation

H332: Harmful if inhaled

H370: Causes damage to optic nerve and central nervous system

Precautionary Statement(s):

P210: Keep away from heat, sparks, open flames, hot surfaces. - No smoking

P233: Keep container tightly closed

P240: Ground / bond container and receiving equipment

P241: Use explosion-proof electrical, ventilating, lighting equipment

P242: Use only non-sparking tools

P243: Take precautionary measures against static discharge
P260: Do not breathe mist, vapors, or spray
P264: Wash exposed skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P280: Wear protective gloves, protective clothing, eye protection, face protection

Precautionary Response:

P301+P310: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
Rinse skin with water/shower
P305 + P351 P338: IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
P330: Rinse Mouth
P370+P378: In case of fire: Use carbon dioxide (CO₂), powder, alcohol-resistant foam for extinction

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed
P403+P235: Store in a well-ventilated place. Keep cool

Disposal:

P501: Dispose of contents/container to comply with local, state and federal regulations

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Section 3: Composition / Information on Ingredients

The terms "hazardous" and "hazardous materials" as used within this SDS (EU - MSD) should be interpreted as defined by, and accordance with, the OSHA Hazard Communication Standard (29 CFR 1910:1200) and the EU Occupational Exposure Limits (OEL) REGULATION (EC) No 1272/2008 including cited Appendices, Lists, References, etc., all of which are hereby incorporated by reference and stated below as appropriate.

OECD SIDS documents published by UNEP Chemicals in response to its mandate to facilitate the access to information needed for health and environmental risk assessment of chemicals. The documents contain the information gathered and an Initial Assessment performed under the framework of the OECD HPV Chemicals Program.

<u>SUBSTANCE</u>	<u>CAS NUMBER</u>	<u>EC NUMBER</u>	<u>% BY WEIGHT</u>
Denatured Alcohol	64-17-5	200-578-6	40.0% - 70.0%
Propylene Glycol	57-55-9	200-338-0	10.0% - 30.0%
Diamond	7782-40-3	231-111-4	0.1% - 5.0%
Proprietary Non-hazardous Ingredients	N/A	N/A	10.0% - 30.0%
Proprietary Non-hazardous Fragrance	N/A	N/A	0.0% - 1.0%
Proprietary Non-hazardous Dye	N/A	N/A	0.0% - 1.0%

Hazardous Mixtures: None

(See Section 8.0 for Occupational Exposure Limits)

Section 4: First Aid Measures

First-aid measures general:

Check the vital functions.
Unconscious: maintain adequate airway and respiration.
Respiratory arrest: artificial respiration or oxygen.
Cardiac arrest: perform resuscitation.
Victim conscious with labored breathing: half-seated.
Victim in shock: on his back with legs slightly raised.
Vomiting: prevent asphyxia/aspiration pneumonia.

Prevent cooling by covering the victim (no warming up).
Keep watching the victim.
Give psychological aid.
Keep the victim calm, avoid physical strain.
Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation:

If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing.
Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact:

Rinse immediately with plenty of water. Gently wash with plenty of soap and water.
Obtain medical attention if irritation persists.

First-aid measures after eye contact:

Immediately rinse with water for a prolonged period while holding the eyelids wide open.
Seek medical attention if material is embedded in eye.
If eye irritation persists: Get medical advice and attention.

First-aid measures after ingestion:

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Symptoms/injuries:

Repeated or prolonged inhalation may damage lungs.

Symptoms/injuries after inhalation:

May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. Dizziness. Headache. Narcosis.

Symptoms/injuries after skin contact:

Dry skin. Redness and cracking of the skin.

Symptoms/injuries after eye contact:

Redness, pain.

Symptoms/injuries after ingestion:

Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Chronic symptoms:

Respiratory difficulties and lung damage.

Section 5: Fire Fighting Measures

Fire Hazard:	Flammable
Extinguishing Media:	Use Class B or C type fire extinguisher, or Carbon Dioxide in a large area.
Special Firefighting Procedures:	Typical for gasoline or other flammable fuels.
Unusual Fire and Explosion Hazards:	Gas and vapor are explosive with air within explosion limits.
Reactivity:	Upon combustion, CO and CO ₂ are formed.
Protective Equipment for Firefighting:	Self-Contained Breathing Apparatus and clothing for chemical fires.
Protection during Firefighting:	Use normal individual fire protective equipment.
Precautionary Measures Fire:	Exposure to fire / heat: Keep upwind; Consider evacuation; Seal off low-lying areas; Have residence shelter in place.

Section 6: Accidental Release Measures

Personal Precautions / Protective Equipment:

- Evacuate spill area and keep unprotected personnel away.
- Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc.
- Do not touch damaged containers or spilled material unless wearing appropriate protective equipment.
- Do not breathe vapor, gas, fume or spray. Ventilate area with explosion proof equipment or wear SCBA.

Environmental Precautions:

Prevent further leakage or spillage and comply with local, state and federal regulations.

Methods / Materials for Containment & Clean-up:

Mark the danger area. Stop engines and no smoking. No naked flames or sparks.
Spark- and explosion proof appliances and lighting equipment. Wash contaminated clothes.

- Large Spills: Dike the spilled area. Absorb with vermiculite, dry sand or earth and place into containers. Flush area with water and dispose accordingly. Section 13 of this SDS.
- Small Spills: Absorb with vermiculite, dry sand or earth and place into containers. Flush area with water and dispose accordingly.

Section 7: Handling and Storage

Precautions for Safe Handling:

- Wear suitable protective clothing and eye/face protection.
- Use with adequate ventilation.
- Avoid contact with eyes, skin, and clothing.
- Keep container tightly closed.
- Avoid breathing spray or mist.

Conditions for Safe Storage:

- Store in original tightly closed container.
- Keep away from food, drink and animal feeding stuffs.
- Use care in handling / storage.
- Take precautions against electrostatic charges.
- Keep away from open flames / heat.
- Keep away from ignition sources / sparks.
- Avoid prolonged and repeated contact with skin.
- Keep container tightly closed.
- Measure the concentration in the air regularly.
- Work under local exhaust / ventilation.
- Store in accordance with local / regional /national / international regulations.

SUITABLE CONTAINER: stainless steel, carbon steel, polyethylene, polypropylene.

Section 8: Exposure Controls / Personal Protection

Control Parameters

Denatured Alcohol

ACGIH TWA (mg/m³)

ACGIH STEL

ACGIH TLV 1000 (mg/m³)

NIOSH REL (TWA) (mg/m³)

OSHA PEL (TWA) (mg/m³)

Air Contaminates

IDLH (mg/m³)

OECD SIDS UNEP TLV

BAuATRGs 900

CAS #: 64-17-5

1000 mg/m³

1000 mg/m³

1000 mg/m³

NIOSH REL (TWA) (mg/m³) 1000 ppm

OSHA PEL (TWA) (mg/m³) 1900 ppm

Not Available

Not Available

Not Available

TLV: Threshold Limit Value of a chemical substance is a level to which it is believed a worker can be exposed day after day for a working lifetime without adverse health effects.

TWA: Time Weighted Average - TLV-TWA: the average exposure on the basis of a 8h/day, 40h/week work schedule

STEL: Short Term Exposure Level is an employee's 15-minute time weighted average exposure at any time during a work day and cannot be repeated more than 4 times in a day.

Personal Protective Equipment: Wear chemical resistant clothing, chemical goggles and chemical resistant gloves while handling under normal conditions.



Respiratory Protection:

In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

Use an appropriate NIOSH approved respirator if airborne fume concentrations exceed the appropriate PEL or TLV.

Wear air supplied respiratory protection if exposure concentrations are unknown.

All requirements set forth in 29CFR1910.134 must be met.

Protective Gloves:

Butyl Rubber and Nitrile gloves are recommended.

Be cautious as the liquid may penetrate the glove.

Frequent change is advisable.

Ventilation:

Use local exhaust ventilation which is adequate to limit personal exposure to airborne fumes to levels which do not exceed the appropriate PEL or TLV.

If such equipment is not available, use respiratory protection as specified above.

Eye Protection:

Chemical / splash goggles are recommended.

Eye wash station must be present.

Other Equipment:

None

Section 9 Physical and Chemical Properties

Appearance and Odor: Liquid, Fragrance + Alcohol

Color: Will vary with size

Physical State: Liquid

pH: Not Available

Viscosity: Not Available

Specific Gravity: Not Available

Vapor Density: Not Available

Vapor Pressure: Not Available

Melting Point: Not Applicable

Boiling Point: 185 F

Flash Point: 68 F Closed Cup

Freezing Point: Not Available

Percent Volatility: Not Available

Evaporation Rate: (baC=1) Not Available

Solubility in Water: Completely Soluble

Solubility in Oil: Not Soluble

Solubility in Solvents:

Not Available

Section 10: Stability and Reactivity

Reactivity:	Hazardous reaction will not occur under normal conditions.
Stability:	This composition is stable under normal conditions.
Incompatibility (materials to avoid):	Strong Oxidizers, Peroxides, Ammonia, Alkali Metals
Hazardous Decomposition Products:	Carbon and Nitrogen Oxides.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Strong oxidizing agents. Heat, flames and sparks. Avoid temperatures exceeding the flash point

Section 11: Toxicological Information

Denatured Alcohol:	CAS # 64-17-5
Acute Toxicity – Oral LD50:	7060 mg/kg (Rat)
Acute Toxicity – Dermal LD50:	No Data
Acute Toxicity – Inhalation LD50:	20,000 mg/kg (10H) (Rat)
Acute Toxicity:	Toxic if inhaled
Skin Corrosion/Irritant:	Irritating to skin.
Serious Eye Damage/Irritant:	Serious Eye Damage Can Occur. Serious Damage to the Liver Can Occur.
Respiratory/Skin Sensitization:	Not Classified
Germ Cell Mutagenicity:	Denatured alcohol has tested positive for mutagenicity in some test systems.
Carcinogenicity:	Not Classified
Reproductive Toxicity:	Human, Female, Oral – Neonatal Measures or Effects
Target Organ Toxicity (Single Exposure):	May cause respiratory/skin irritation.
Target Organ Toxicity (Repeated Exposure):	May adversely affect the liver and kidney based on animal testing.
Aspiration Hazard:	Toxic if inhaled
Teratogenicity:	Avoid contact during pregnancy or while nursing.

Section 12: Ecological Information

Denatured Alcohol:	CAS # 64-17-5
Aquatic:	Fish – LC50 – 13000 mg / L Fish – EC50 – No Data Available
Threshold Limit Algae:	No Data Available
Ecotoxicity:	No information available
Persistence and Degradability:	Denatured alcohol is readily biodegradable – >45% after 5 days.
Bioaccumulative Potential:	No information available
Mobility in Soil:	No information available
Other Adverse Effects:	Environmental hazards cannot be excluded by inappropriate handling or disposal.

Section 13 Disposal Considerations

Remove waste in accordance with local and/or national regulations.

Hazardous waste shall not be mixed together with other waste.

Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste.

Hazardous waste shall be managed responsibly.

All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.

Recycle by distillation.

Do not landfill.

Incinerate under surveillance with energy recovery.

Do not discharge into drains or the environment.

Use appropriate containment to avoid environmental contamination. .

Dispose in a safe manner in accordance with local, state and federal regulations

Section 14: Transportation Information

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:	Flammable Liquids, N.O.S. (Ethanol Mixture)
Hazard class or division:	3-Flammable and Combustible
Identification number:	UN 1993
Packing group:	II
Label:	3-Flammable Liquids
Reportable Quantity:	Not Reportable

International Air Transportation (ICAO/IATA)

Proper shipping name:	Flammable Liquids, N.O.S. (Ethanol Mixture)
Hazard class or division:	3-Flammable Liquids
Identification number:	UN 1993
Packing group:	II
Passenger Aircraft Limitation:	5L
Cargo Aircraft Limitation:	60L

Water Transportation (IMO)

Proper shipping name:	Flammable Liquids, N.O.S. (Ethanol Mixture)
Hazard class or division:	3.2 - Flammable Liquids
Identification number:	UN 1993

DOT Special Provisions (49 CFR 172.102): None

Section 15: Regulatory Information

U.S. FEDERAL REGULATIONS:

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA):

This product has a Reportable Quantity (RQ) of 100,000 lbs. for denatured alcohol.

Toxic Substance Control Act (TSCA):

All of the components of this material are listed on the TSCA Chemical Substances Inventory.

Clean Water Act (CWA):

Listed under sections of the Clean Water Act. CWA Section 1321. Contact your local / state authorities to determine if substances are regulated under their jurisdiction.

Clean Air Act (CAA):

Listed under various sections of the Clean Air Act. Contact your local / state authorities to determine if substances are regulated under their jurisdiction.

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

This product contains chemicals subject to annual release reporting requirements Under SARA Title III, Section 313 (40 CFR 372). Fire Hazard – Denatured Alcohol.

EUROPEAN / INTERNATIONAL REGULATIONS:**Control of Substances Hazardous to Health (COSHH):**

Component(s) are listed under various sections of the COSHH regulation.

Contact your local authorities to determine if substances are regulated under their jurisdiction.

Scottish Environmental Protection Agency (SEPA):

Component(s) are listed under various sections of SEPA.

Contact your local authorities to determine if substances are regulated under their jurisdiction.

Canada:

Components are listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification:

Class B Division 2 – Flammable Liquid

Class D Division 2 Subdivision B – Toxic material causing other toxic effects.

Hazard Classification

European Union Directives 67/548/EEC and 1999/45/EC

Safety Phrases:	S 23:	Do not breathe fumes
	S 24/25:	Avoid contact with skin and eyes.
	S 26:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
	S 38:	In case of insufficient ventilation wear suitable respiratory equipment.
	S 36:	Wear suitable protective clothing.
	R10:	Xn1 R65m R66, R67

International Chemical Inventory Status:

Australia AICS: All components are listed.

Canada DSL: All components are listed.

European Union EINECS: All components are listed.

Japan ENCS: All components are listed.

United States TSCA: All components are listed.

U.S. STATE REGULATORY INFORMATION:

The components of these products are covered under specific State regulations, as denoted below:

New Jersey Right to Know Components: Denatured Alcohol CAS # 64-17-5

CALIFORNIA PROPOSITION 65: This product contains chemicals regulated under California Proposition 65.

Methyl Alcohol (67-56-1): Reproductive Toxicity

International Air Transport Authority (IATA): Hazardous air transport. (See Section 14)

Section 16: Other Information

NFPA health hazard

2 - Can cause temporary incapacitation or residual injury.

NFPA fire hazard

3 – Can be ignited under almost all ambient temperature conditions.

NFPA reactivity

0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health

2 – Moderate Hazard

Flammability

3 – High Hazard

Physical

0 – Minimal Hazard

Personal Protection

H

Reference:

UNEP Publications, OECD SIDS, Chemical Abstract Search (CAS) Database, European Chemicals Agency (ECHA), Workplace Hazard Material Information System (WHMIS)

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; WHMIS=Workplace Hazard Material Information System; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

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