

## Safety Data Sheet

Product No. 17705-1 to 17740-5 Pelco® Protein A – Gold Conjugate: 5 to 100 nm Size Nanoparticles

Issue Date (06/01/22)

Review Date (06/01/22)

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### Section 1: Product and Company Identification

**Product Name: Pelco® Protein A – Gold Conjugate: 5 to 100 nm Size Nanoparticles**

Synonym: Protein A conjugated gold nanoparticles in solution

#### 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

#### Classification of the substance or mixture:

Not a hazardous substance or mixture.

This product is not subject to GHS classification as a hazardous substance.

#### Label elements

Hazard Pictograms: NA

Signal Word: NA

Hazard Statements: NA

Precautionary Statements: NA

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### Section 3: Composition / Information on Ingredients

This product contains Protein A conjugated gold nanoparticles in solution

|   | <u>COMPONENT</u>               | <u>% (w/v)</u> | <u>CAS No.:</u> |
|---|--------------------------------|----------------|-----------------|
| 1 | Colloidal Gold                 | <0.02          | 7440-57-5       |
| 2 | Protein A                      | <0.02          | -----           |
| 3 | Disodium Hydrogen Phosphate    | 0.14           | 7558-79-4       |
| 4 | Potassium Dihydrogen Phosphate | 0.02           | 7778-77-0       |
| 5 | Sodium Chloride                | 0.80           | 7647-14-5       |
| 6 | Potassium Chloride             | 0.02           | 7447-40-7       |
| 7 | Bovine Serum Albumin           | 1              | 9048-46-8       |
| 8 | Glycerol                       | <20            | 56-81-5         |
| 9 | Water                          | <78            | 7732-18-5       |

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## **Section 4: First Aid Measures**

### **In case of skin contact:**

Immediately remove contaminated clothing and wash extensively with soap and water and seek medical advice if symptoms occur.

### **In case of ingestion:**

If swallowed and person is conscious, wash mouth with water, seek medical attention immediately.

### **In case of eye contact:**

Rinse immediately with plenty of water and seek medical advice.

### **In case of inhalation:**

Remove to fresh air. If breathing becomes difficult, seek medical advice.  
If not breathing, give artificial respiration.

### **Immediate medical attention and special treatment needed:**

No data available

The most important known symptoms and effects are described in the labeling Section 2 and/or in Section 11.

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## **Section 5: Fire Fighting Measures**

### **Suitable extinguishing media:**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **Specific hazards arising from the substance or mixture:**

Sodium oxides, Hydrogen chloride gas, Nitrogen oxides, Carbon oxides

### **Special protective equipment and precautions for fire-fighters:**

Wear self-contained breathing apparatus if necessary.

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## **Section 6: Accidental Release Measures**

### **Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment.  
Avoid aerosols or dust formation.  
Avoid breathing vapors, mist or gas.

### **Methods and materials for containment and cleaning up:**

Keep in a suitable closed container for disposal.  
Do not allow product to enter drains.  
For disposal see section 13.

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## **Section 7: Handling and Storage**

### **Precautions for safe handling:**

Avoid formation of aerosols and dust.  
Provide adequate exhaust ventilation at places where dust and aerosols may form.

### **Conditions for safe storage:**

Keep container tightly closed in a dry and well-ventilated place.  
Containers, which are opened, must be carefully resealed and kept upright to prevent leakage.  
Recommended storage temperature: 36-46°F / (2-8°C)

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## Section 8: Exposure Controls / Personal Protection

|                                          |                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appropriate engineering controls:</b> | Standard industrial hygiene practice.                                                                                                                                                                                                                                                                                   |
| <b>Body protection:</b>                  | The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.                                                                                                                                                                       |
| <b>Hand protection:</b>                  | Handle with gloves. Gloves must be inspected prior to use.<br>Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.<br>Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.<br>Wash and dry hands. |
| <b>Respiratory protection:</b>           | Respiratory protection not required.<br>In case of insufficient ventilation or for nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respiratory cartridges.<br>Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).               |
| <b>Eye protection:</b>                   | Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).                                                                                                                                                                                          |

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## Section 9 Physical and Chemical Properties

|                                         |                          |
|-----------------------------------------|--------------------------|
| Physical state:                         | Liquid                   |
| Appearance/Color:                       | Dark red to Brown Opaque |
| Odor:                                   | Odorless                 |
| Odor threshold:                         | no data available        |
| pH                                      | 7-8                      |
| Melting Point/Freezing point:           | no data available        |
| Initial boiling point/boiling range:    | no data available        |
| Flash point:                            | no data available        |
| Evaporation rate:                       | no data available        |
| Flammability (solid; gas):              | no data available        |
| Lower flammable/explosive limit:        | no data available        |
| Upper flammable/explosive limit:        | no data available        |
| Vapor pressure:                         | no data available        |
| Vapor density:                          | no data available        |
| Relative density:                       | no data available        |
| Solubility:                             | no data available        |
| Partition coefficient (n-octanol/water) | no data available        |
| Auto-ignition temperature:              | no data available        |
| Decomposition temperature:              | no data available        |
| Viscosity:                              | no data available        |

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## Section 10: Stability and Reactivity

|                                     |                                                                                                                                                                                                                          |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity:                         | No data available                                                                                                                                                                                                        |
| Chemical stability:                 | Stable under recommended storage conditions                                                                                                                                                                              |
| Possibility of hazardous reactions: | No data available                                                                                                                                                                                                        |
| Conditions to avoid:                | Temperatures below 0°C                                                                                                                                                                                                   |
| Materials to avoid:                 | Oxidizing agents, strong acids                                                                                                                                                                                           |
| Hazardous decomposition products:   | Products formed under fire conditions. <ul style="list-style-type: none"><li>• Oxides of phosphorus</li><li>• Sodium oxides</li><li>• Hydrogen chloride gas</li><li>• Potassium oxides</li><li>• Carbon oxides</li></ul> |
| Other decomposition products:       | No data available                                                                                                                                                                                                        |
| In the event of fire: see section 5 |                                                                                                                                                                                                                          |

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## Section 11: Toxicological Information

|                                             |                                                          |
|---------------------------------------------|----------------------------------------------------------|
| <b>Oral LD50:</b>                           | No data available                                        |
| <b>Inhalation LD50:</b>                     | No data available                                        |
| <b>Dermal LD50:</b>                         | No data available                                        |
| <b>Other information on acute toxicity:</b> | No data available                                        |
| <b>Skin:</b>                                | No data available - May be harmful in contact with skin. |
| <b>Ingestion:</b>                           | No data available - May be harmful if ingested.          |
| <b>Eyes:</b>                                | No data available - May be harmful in contact with eyes. |
| <b>Inhalation:</b>                          | No data available - May be harmful if inhaled.           |
| <b>Germ Cell Mutagenicity:</b>              | No data available                                        |

### Carcinogenicity

|        |                                                                                                                                                         |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| IARC:  | 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. |
| ACGIH: | 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 ACGIH |

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## Section 12: Ecological Information

|                         |                   |
|-------------------------|-------------------|
| Ecological Information: | No data available |
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## Section 13 Disposal Considerations

Not a hazardous substance or mixture.  
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

|                                |                                   |
|--------------------------------|-----------------------------------|
| Hazard class:                  | Not regulated for transportation. |
| Product identification number: | Not determined                    |

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## **Section 15: Regulatory Information**

### **United States Federal Regulations**

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

|                       |                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------|
| OSHA Hazards:         | No known OSHA hazards                                                                        |
| SARA 302 Components:  | No chemicals in this material are subject the reporting requirements of SARA Section 302.    |
| SARA 313 Components:  | No chemicals in this material are subject to the reporting requirements of SARA Section 313. |
| SARA 311/312 Hazards: | No SARA Hazards.                                                                             |
| RCRA:                 | ND                                                                                           |
| TSCA:                 | Gold, as colloid (7440-57-5) is listed.                                                      |
| CERCLA: None listed   |                                                                                              |

### **State Regulations**

California Proposition 65: This product does not contain any chemicals known to the State of CA to cause cancer, birth defects, or any other reproductive harm.

### **International Regulations**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (Canada) and the safety data sheet contains all of the information required by those regulations.

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## **Section 16: Other Information**

This product is for laboratory research purposes, not for diagnostic or therapeutic use in humans or animals.

### **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.