



## Material Safety Data Sheet

Product No. 15725 through 15989-1 BioCell Gold Conjugates

Issue Date (11-06-08)

Review Date (05-04-12)

### Section 1: Product and Company Identification

**Product Name: BioCell Gold Conjugates**

Synonym: EM Grade Conjugates (all sizes), Various Names, applicable to all.

**Company Name**

Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477

Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

### Section 2: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP	IARC	OSHA regulated
EM Grade Conjugate (ND)	<0.01	ND	ND	ND	ND	ND
Glycerol* (56-81-5)	20	15	10	No	No	No
Sodium Azide (26628-22-8)	0.097	ND	0.29	No	No	No

\* Not in the 2 nm the Product No.15860

### Section 3: Hazard Identification

#### Emergency overview

Appearance: Liquid, clear straw to deep purple-red metallic color.

Immediate effects: Exposure to gold compounds may be harmful. Can cause contact dermatitis. The toxicological properties have not been thoroughly investigated.

#### Potential health effects

Primary Routes of entry: Inhalation, ingestion and skin absorption.

Signs and Symptoms of Overexposure: ND

Eyes: May cause irritation. May be harmful by absorption.

Skin: May cause irritation. May be harmful by absorption.

Ingestion: The toxicological properties have not been thoroughly investigated. May be harmful by ingestion.

Inhalation: May be harmful by inhalation.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: None.

See Toxicological Information (Section 11)

**Potential environmental effects**

See Ecological Information (Section 12)

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**Section 4: First Aid Measures**

**If accidental overexposure is suspected**

Eye(s) Contact: In case of contact with eyes, flush with copious amount of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

Skin Contact: In case of contact with skin, flush with copious amount of water for at least 15 minutes. Remove contaminated clothing and shoes. Consult a physician.

Inhalation: If inhaled, remove to fresh air. If breathing becomes difficult call a physician.

Ingestion: Not for human consumption. If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**Note to physician**

Treatment: Treat symptomatically and supportively.

Medical Conditions generally Aggravated by Exposure: ND

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**Section 5: Fire Fighting Measures**

Flash Point: Not combustible

Flammable Limits: Not flammable

Auto-ignition point: NA

Fire Extinguishing Media: Use appropriate to the surrounding fire conditions.

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: None

Hazardous combustion products: May occur under high heat, oxides of carbon and nitrogen

DOT Class: None

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**Section 6: Accidental Release Measures**

Steps to be Taken in Case Material is Released or Spilled: Wear rubber gloves, chemical safety goggle and rubber boots (if applicable). Absorb on sand or vermiculite and place in closed container for disposal.

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 breathe vapors and mist. Do not get on skin or in eyes. Do not ingest. Keep cap tight.

Storage temperature: Long term stability when stored at -20 °C or less. **Except for the #15860, 2 nm: Store at 4 °C. Do Not Freeze**

Storage Pressure: NA

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**Section 8: Exposure Controls / Personal Protection**

**Engineering Controls**

Ventilation required: Mechanical exhaust required.

#### **Personal Protection Equipment**

Respiratory protection: NIOSH/MSHA approved respirator.

Protective gloves: Compatible chemical resistant gloves.

Skin protection: Gloves

Eye protection: Chemical safety goggles.

Additional clothing and/or equipment: ND

#### **Exposure Guidelines**

See Composition/Information on Ingredients (Section2)

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#### **Section 9 Physical and Chemical Properties**

Appearance and Physical State: Liquid, clear straw to deep purple-red metallic color.

Odor (threshold): None

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

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: ND

Solubility in Water: ND

Molecular Weight: ND

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#### **Section 10: Stability and Reactivity**

Stability: Stable

Conditions to Avoid: Heat. Store under refrigeration. See Section 7.

Materials to Avoid (Incompatibility): Azides can react with other metals.

Hazardous Decomposition Products: May emit toxic fumes under heat exposure.

Hazardous Polymerization: Will not occur.

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#### **Section 11: Toxicological Information**

Results of component toxicity test performed: Sodium Azide (26628-22-8): Oral rat

LD50: 27 mg/kg Skin rabbit LD50: 20 mg/kg.

Inhalation rat LC50: 37 mg/m<sup>3</sup>. Investigated as a tumorigen and mutagen.

Glycerol (56-81-5): Oral rat LD50: 12,600 mg/kg. Investigated as a mutagen, reproductive effector.

Human experience: ND

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: Sodium Azide (26628-22-8): When released into the soil, this material is not expected to biodegrade. When released into the soil, this material is

expected to leach into groundwater. When released into the air, this material may be moderately degraded by photolysis.

Glycerol (56-81-5): When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is not expected to evaporate significantly. When released into water, this material is expected to readily biodegrade. This material is not expected to significantly bioaccumulate. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition.

**Environmental Toxicity:**

Sodium Azide (26628-22-8): Dangerous to the environment. Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment. Freshwater Fish Species Data: 96 Hr LC50 *Oncorhynchus mykiss*: 0.8 mg/L; 96 Hr LC50 *Lepomis macrochirus*: 0.7 mg/L; 96 Hr LC50 *Pimephales promelas*: 5.46 mg/L [flow-through]

Glycerol (56-81-5): This material is not expected to be toxic to aquatic life.

Chemical Fate Information: ND

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**Section 13 Disposal Considerations**

RCRA 40 CFR 261 Classification: ND

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: Not regulated

IATA: Proper shipping name: Not regulated

IMO: Proper shipping name: Not regulated

Marine Pollutant: No

Canadian TDG: ND

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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: Section 313: Sodium Azide (26628-22-8):

SARA Title III: Section 302: Sodium Azide (26628-22-8): RQ = 1000 lbs (454 Kg)

RCRA: Sodium Azide (26628-22-8): RCRA 261.33: P105

TSCA: Components listed. Sodium Azide (26628-22-8): TSCA 8(d): No

CERCLA: Sodium Azide (26628-22-8): RQ = 1000 lbs (454 Kg)

**State Regulations**

California Proposition 65: None

**International Regulations**

Canada WHMIS: ND

Europe EINECS Numbers: ND

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**Section 16: Other Information**

Label Information: ND

European Risk and Safety Phrases: ND

European symbols needed: ND

Canadian WHMIS Symbols: ND

Hazard Rating: Health: **ND**; Fire: **ND**; Reactivity: **ND**

(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

**Abbreviations used in this document**

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

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**Disclaimer**

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