SPI Supplies Division

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Safety Data Sheet

Date Effective: November 13, 2015

SPI #04220-AB, 04224-AB, 04228-AB, 04229-AB, 04230-AB, 04231-AB, 04232-AB, 04233-AB, 04234-AB, 04235-AB, 04267-AB, 04271-AB, 04275-AB, 04279-AB, 04283-AB, 04287-AB, 04291-AB, 04295-AB, 04297-AB, 04298-AB, 04299-AB, 04365-AB, 04403-AB, 04404-AB, 04405-AB, 04406-AB, 04407-AB, 04408-AB, 04410-AB, 04411-AB, 04415-AB, 04416-AB, 04417-AB, 04420-AB, 04421-AB, 04516-AB, 04518-AB, 04520-AB, 04522-AB, 04530-AB, 04538-AB, 04539-AB, 04541-AB, 04542-AB, 04554-AB, 04596-AB, 04597-AB, 04598-AB, 04599-AB, 04602-AB, 04603-AB, 04605-AB, 04606-AB, 04608-AB, 04609-AB, 04610-AB, 04611-AB, 04613-AB, 04614-AB, 04615-AB, 04616-AB, 04629-AB, 04630-AB, 04631-AB, 04635-AB, 04636-AB, 04637-AB, 04638-AB, 04639-AB, 04641-AB, 04642-AB, 04647-AB, 04648-AB, 04649-AB, 04651-AB, 04654-AB, 04656-AB, 04658-AB, 04659-AB, 04660-AB, 04661-AB, 04662-AB, 04665-AB, 04670-AB, 04672-AB, 04674-AB, 04676-AB, 04716-AB, 04718-AB, 04720-AB, 04722-AB, 04730-AB, 04756-AB, 04758-AB, 04760-AB, 04762-AB, 04767-AB, 04771-AB, 04775-AB, 04779-AB, 04783-AB, 04787-AB, 04791-AB, 04795-AB, 04797-AB, 04798-AB, 04799-AB, 04829-AB, 04830-AB, 04831-AB, 04835-AB, 04836-AB, 04837-AB, 04847-AB, 04848-AB, 04849-AB, 04851-AB, 04859-AB, 04860-AB, 04861-AB, 04865-AB, 04872-AB, 04874-AB, 04876-AB SPI-MARK[™] GOLD CONJUGATES

Section 1: Identification

Chemical Name/Synonyms......EM Grade Gold Conjugates

Emergencies Contacting CHEMTREC: 24 Hour Emergency Use Only #'s... Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Product or Trade Name.....SPI-MARK[™] GOLD CONJUGATES

CAS #'s.....7440-57-5, 56-81-5, 26628-22-8

Chemical Formula..... mixture

HAZARDS CLASSIFICATION:

Classification of the Substance/Mixture: Not a hazardous substance or mixture.

GHS Label Elements Including Precautionary Statements:

Not a hazardous mixture.

Hazards Not Otherwise Classified (HNOC) or Not Covered by GHS - none

Hazardous Material Information System USA

Health0	
Fire Hazard0)
Reactivity0)
Personal Protection	

NFPA Rating (estimated)

Health	0
Flammability	0
Reactivity	0

PER CI	ENT EINE	CS/ELINCS
EM Grade Conj	ugate	n/a
n/a	n/a	
Colloidal Gol	d	1440-57-5
<.01	231-	165-9
Glycerol		56-81-5
15-25	200-	289-5
Sodium Azide,	preservative	26628-22-8
<0.1	247-	852-1

Section 4: First Aid Measures

Eyes: In case of eye contact, flush with plenty of water, lifting upper and lower lids from time to time, for at least 15 minutes. Seek medical attention.

Skin: In case of skin contact, flush with plenty of water for 15 minutes. Remove contaminated clothing and wash before reuse.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Seek medical attention.

Inhalation: Remove to fresh air. If breathing becomes difficult, seek medical attention.

Notes to Physician: Treat symptomatically and supportively.

Treactivity	
	Section 5: Fire Fighting Measures
Section 2: Hazard Identification	General Information:
Precautionary Statement: Caution	This product is noncombustible. Use ex-
Eye: May be eye irritant.	tinguishing media appropriate to the sur- rounding fire conditions.
Skin: May cause skin irritation. Wash thoroughly with plenty of soap and water after use.	Extinguishing Media: Use extinguishing media appropriate to the surrounding fire conditions.
<pre>Ingestion: Not for human consumption. If ingested, seek medical attention.</pre>	Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits
Inhalation: If symptoms occur, remove to fresh air and seek medical attention.	toxic fumes under fire conditions/heated.
Chronic: Not known.	Section 6: Accidental Release

Chiomic: Not Known.		Section 6: Accidental Release
Section 3: Composition		Measures
Section 5. Composition		General Information:
Component Name	CAS#	General information.

Spills/Leaks:

Wear respirator, chemical safety goggles, rubber boots and heavy rubber boots. Absorb on sand or vermiculite and place in closed container for disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7: Handling and Storage

Handling: Handle in accordance with good industrial hygiene and safety practices. The practices include avoiding unnecessary exposure and removal of material from eyes, skin and clothing.

Storage: Store under refrigeration.

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

EXPOSURE LIMITS:

Colloidal Gold: Not applicable Sodium Azide: ORL-MUS LD50; 27 mg/kg; ORL-WMN LDLO: 14 mg/kg; ORL-MAN LDLO: 29 mg/kg; SKN-RAT LD50: 50 mg/kg

Engineering Controls: Mechanical exhaust required.

Personal Protective Equipment:

Eyes: Wear chemical safety goggles.

Skin: Wear compatible chemical resistant gloves.

Clothing: Wear long sleeves or lab coat to prevent skin contact. Wash contaminated clothing before reuse.

Respirators: Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limita-product have not been thoroughly investtions specified by NIOSH/MSHA or the man- igated. ufacturer. Respiratory protection programs must comply with 29 CFR 1910.134.

Section 9: Physical and Chemical **Properties**

Physical State: Liquid Appearance: pale straw to deep purplered color Odor: n/a pH: varies from pH5 to pH10 Vapor Pressure: n/a Vapor Density: n/a Evaporation Rate: n/a Viscosity: n/a Boiling Point: n/a Freezing/Melting Point: n/a Autoignition Temperature: n/a Flash Point: n/a Decomposition Temperature: n/a Explosion Limits Lower: n/a **Upper:** n/a Solubility in water: aqueous solution **Specific Gravity/Density:** n/a Molecular Formula: n/a Molecular Weight: n/a

Section 10: Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: Heat over 50 degrees C. Store under refrigeration.

Incompatibilities with other materials: Contact with salts will cause precipitation of the colloid.

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

RTECS Number: MD507000 (gold) CAS# 7440-57-5

Acute Effects: May be harmful by inhalation, ingestion, or skin absorption.

May cause irritation. Exposure to gold compounds can cause contact dermatitis.

The toxicological properties of this

Section 12: Ecological Information

No data available.

Section 13: Disposal Considerations

this material.

Section 14: Transport Information

Non-hazardous from standpoint of shipping. Low temperature shipping recommended.

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US DOT Hazard Class: n/a
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IATA (for international shipments) n/a
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Section 15: Regulatory Information

This product has not yet been fully tested.

Sodium Azide, CAS# 26628-22-8: (present at <0.1%)

SARA 313: listed Section 302: 500lbs TRQ Section 304: 1000 lbs RQ CERCLA: 1000 lb RO RCRA Code: P105 Listed on the Massachusetts and Pennsylvania Right-to-Know Components List.

European:

This material has not been fully tested. Safety phrases: S36 and S37

(suitable protective clothing/gloves)

Canada:

This material has not been fully tested.

DSL/NDSL:

CAS# 7440-57-5 is on the DSL list CAS# 56-81-5 is on the DSL list. CAS# 26628-22-8 is on the DSL list.

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; Contact a licensed waste disposal service to dispose of direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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