

Material Safety Data Sheet (MSDS)

Immunogold Nanoparticle Conjugates

Section 1 Product and Company Information

1.1 Product Catalogue Number(s)	EM Grade Conjugate (all sizes and variants) BA Grade Conjugate (all sizes and variants)
1.2 Company Information	BBISolutions Golden Gate Ty Glas Avenue Llanishen Cardiff CF14 5DX Telephone: +44 (0)29 2074 7232 Facsimile: +44 (0)29 2074 7242
1.3 Emergency Contact	Telephone +44 (0)29 2074 7232 Email: info@bbisolutions.com

Section 2 Composition / Information on Ingredients

CAS Number	Chemical / Preparation Name	Percent	ELINCS/EINECS
None	Colloidal gold nanoparticles	0.001 - 0.01%	
26628-22-8	Sodium azide preservative	0.097%	

Section 3 Hazard Identification

Overview

Avoid contact and inhalation

Potential Health Effects

Eyes:	May cause eye irritation
Skin:	May cause skin irritation. May be harmful if absorbed through the skin
Ingestion:	May be harmful if swallowed
Inhalation:	Material may be irritating to mucous membrane and upper respiratory tract.
Chronic:	Not known

Section 4 First Aid Measures

Eyes:	Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Call a physician.
Skin:	Flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.
Ingestion:	If swallowed, wash out mouth with water provided the person is conscious. Call a physician.
Inhalation:	Remove to fresh air. If breathing becomes difficult, Call a physician.

Notes to Physician

N/A

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Section 5 Fire Fighting Measures

General Information

Wear self-contained breathing apparatus and protective clothing. Prevent contact with skin and eyes. Emits toxic fumes under fire conditions/heated.

Extinguishing Media

Water spray. Carbon dioxide, dry chemical powder or appropriate foam.

Section 6 Accidental Release Measures

General Information

Spills / Leaks

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

Section 7 Handling and Storage

Handling

Avoid contact with skin and eyes.

Storage

Store between 2 – 8°C. Can be stored long term at -20°C to -25°C.

Section 8 Exposure Controls / Personal Protection

Exposure Limits

Chemical Name	ORL-MUS LD50	ORL-WMN LDLO	ORL-MAN LDLO	SKN-RAT LD50
Colloidal Gold	N/A	N/A	N/A	N/A
Sodium Azide	27 mg kg ⁻¹	14 mg kg ⁻¹	29 mg kg ⁻¹	50 mg kg ⁻¹

Personal Protective Equipment

Eyes:	Wear chemical safety goggles.
Skin:	Wear chemical resistant gloves.
Clothing:	Will stain clothing; wear disposable/washable laboratory garments. Rubber boots.
Respirators:	Wear appropriate NIOSH/MSHA approved respirator.

Section 9 Physical and Chemical Properties

Physical State:	Liquid
Appearance:	Colourless/Pale Yellow or Red/Purple.
Odour:	None
pH:	Varies from pH5 to pH10.
Vapour Pressure:	N/A
Vapour Density:	N/A
Evaporation Rate:	As water
Viscosity:	As water
Boiling Point:	As water
Freezing / Melting Point:	As water
Auto-ignition Temperature:	N/A
Flash Point:	N/A
Decomposition Temperature:	N/A
NFPA Rating:	N/A
Explosion Limits:	Upper: N/A
	Lower: N/A
Solubility:	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 50C
Incompatibilities with other Materials:	Contact with salts will cause precipitation of colloid
Hazardous Decomposition Products:	Not known
Hazardous Polymerisation:	Will not occur

Section 11 Toxicological Information

RTECS Number:	MD5070000 (gold)
CAS Number:	7440-57-5
LD50 / LC50:	
Carcinogenicity:	
IARC:	
Epidemiology:	
Teratogenicity	
Reproductive Effects:	
Neurotoxicity:	
Mutagenicity:	
Other Studies:	

Section 12 Ecological Information

Ecological Hazards:	No data available
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Section 13 Disposal Considerations

Waste Disposal – Material/packaging	Contact a licensed waste disposal service to dispose of this material.
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Section 14 Transport Information

Shipping Name:	Colloidal Gold nanoparticle conjugate.
RID / ADR / DOT 49 CFR:	
ICAO / IATA:	
IMDG Code:	
UN Number:	
MFAG:	
EMS:	
Notes:	Ship at ambient temperature. Non-hazardous for air, sea or road freight.

Section 15 Regulatory Information

European / International Regulations	
Hazard Symbols:	
Risk Phrases:	
Safety Phrases:	S36 and S37 (suitable protective clothing/ gloves)
US Federal Regulations	
TSCA:	
SARA:	
OSHA:	

Section 16 Other Information

MSDS Creation/Revision Date:	01 Nov 2014
Next Revision Due:	01 Nov 2016
Notes:	Customers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall BBI Solutions be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if BBI Solutions has been advised of the possibility of such damages.

USA: 1-800-423-8199 | International: +44 (0)2920 767 499 | info@bbisolutions.com | www.bbisolutions.com

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