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Updated: September 24, 2007

Attn: SAFETY DIRECTOR

# MATERIAL SAFETY DATA SHEET

CATALOG NUMBER: 2016

PRODUCT NAME: NANOGOLD®-STREPTAVIDIN

SECTION 1: IDENTIFICATION

Product Name Nanogold® -Streptavidin

Product Number 2016

Product Description 80 μg/ml Nanogold® -Streptavidin in 20 mM Sodium Phosphate,

150 mM NaCl, pH7.4, with 0.1 % BSA and 0.05 % sodium azide

Appearance Pale brown solution

### SECTION 2: HANDLING, STORAGE AND TRANSPORT INFORMATION

### **HANDLING**

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**STORAGE** 

Suitable: Keep tightly closed.

Store at 2-8°C

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

### SECTION 3: HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

Caution: Avoid contact and inhalation. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Nature of decomposition products not known.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

SECTION 4: FIRST AID MEASURES

### ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### INHALATION EXPOSURE

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

## DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

## EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

#### SECTION 5: FIRE FIGHTING MEASURES

### **EXPLOSION HAZARDS**

Azide reacts with many heavy metals such as lead, copper, mercury, silver, gold to form explosive compounds. Azide reacts with metal halides to give a range of metal azide halides, many of which are explosive.

FLASH POINT

N/A

**AUTOIGNITION TEMP** 

N/A

**FLAMMABILITY** 

N/A

**EXTINGUISHING MEDIA** 

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

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

## METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

### SECTION 7: TOXICOLOGICAL INFORMATION

#### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation. Exposure to gold compounds can cause contact dermatitis.

Skin Absorption: May be harmful if absorbed through the skin.

Eve Contact: May cause eve irritation.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

Kidneys.

## SIGNS AND SYMPTOMS OF EXPOSURE

Many azides cause a fall in blood pressure and some inhibit enzyme action. Laboratory experiments in animals have shown sodium azide to produce a profound hypotensive effect,

demyelination of myelinated nerve fibers in the central nervous system, testicular damage, blindness, attacks of rigidity, and hepatic and cerebral effects. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 8: ECOLOGICAL INFORMATION

No data available.

SECTION 9: OTHER INFORMATION

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