

SAFETY DATA SHEET

Version: 2.0
Date Updated: November 10, 2018
Date Printed: Time:

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name: 5 nm (1-mercaptoundec-11-yl)tetraethylene glycol functionalized gold nanoparticles, 2% (w/v) in water
Product Number: 3013-80MG

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Relevant identified uses

Laboratory chemicals

Uses advised against

Not for drug use

1.3 Details of the supplier of the safety data sheet

Company: Nanoprobes
Address: 95 Horseblock Road, Unit 1
Yaphank, NY 11980
United States
Technical Phone: 877-447-6266, +1 (631) 205-9490
Fax: +1 (631) 205-9493
Emergency Phone: +1 (631) 205-9490
Web Site: www.nanoprobes.com

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]
Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No information found

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name: 5 nm (1-MERCAPTOUNDEC-11-YL)TETRAETHYLENE GLYCOL FUNCTIONALIZED GOLD NANOPARTICLES, 2% (W/V) IN WATER

Ingredient Name	CAS #	EC #	Percent
5 nm (1-Mercaptoundec-11-yl) tetra-ethyleneglycol functionalized gold nanoparticles	Not found	Not found	2% (w/v)
Water	7732-18-5	231-791-2	98% (w/v)

4. FIRST AID MEASURES

4.1 Description of 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.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation

6.2 Environmental precautions

Do not let product enter drains. Discharge into the environment must be avoided

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

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

7.2 Conditions for safe storage, including any incompatibilities

Keep container closed and kept upright to prevent leakage. Recommended storage temperature: 4°C

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) **Appearance Form:** Dark red solution
- b) **Odour** no data available
- c) **Odour Threshold** no data available
- d) **pH:** no data available
- e) **Melting point/freezing point** no data available
- f) **Initial boiling point and boiling range** no data available
- g) **Flash point** no data available
- h) **Evaporation rate** no data available
- i) **Flammability** not flammable
- j) **Upper/lower flammability or explosive limits** no data available
- k) **Vapour pressure** no data available
- l) **Vapour density** no data available
- m) **Relative density** no data available
- n) **Solubility** Soluble in water
- o) **Partition coefficient** no data available
- p) **Auto-ignition temperature** no data available
- q) **Decomposition temperature** no data available
- r) **Viscosity** no data available
- s) **Explosive properties** no data available
- t) **Oxidizing properties** no data available

9.2 Other safety information

no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable: Stable under recommended storage condition within specified expiration date

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents, acids, thiols

10.6 Hazardous decomposition products In the event of fire

see section 5

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: No data available

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.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information Repeated dose toxicity

No data available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US) Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

No components are subject to the Pennsylvania Right to Know Act.

New Jersey Right to Know Components

No components are subject to the New Jersey Right to Know Act.

California Prop. 65 Components

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

16 Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Nanoprobes Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.