

نانوذرات طلا

نانوکلئید تولید شده، حاوی نانوذرات طلاست که به صورت همگن در داخل محلول پراکنده است. این نانو ذرات در اندازه‌های متفاوت خواص اپتیکی مختلفی دارند و به عنوان کاتالیست، ردیاب، عوامل درمانی در صنایع مختلف نقش دارند.

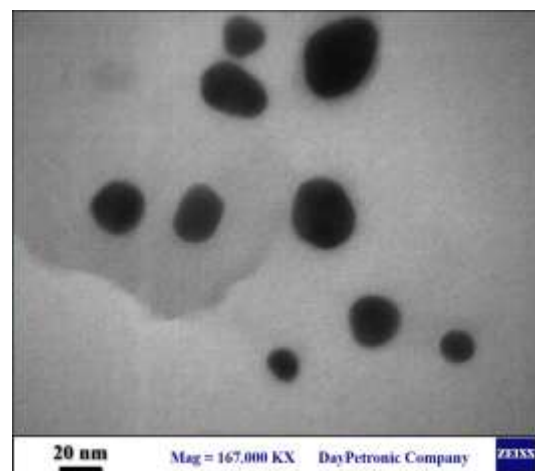
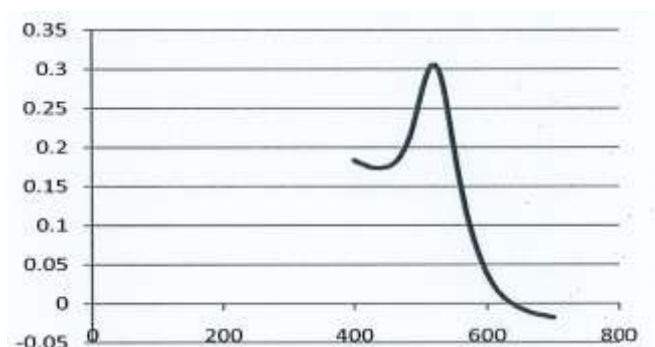
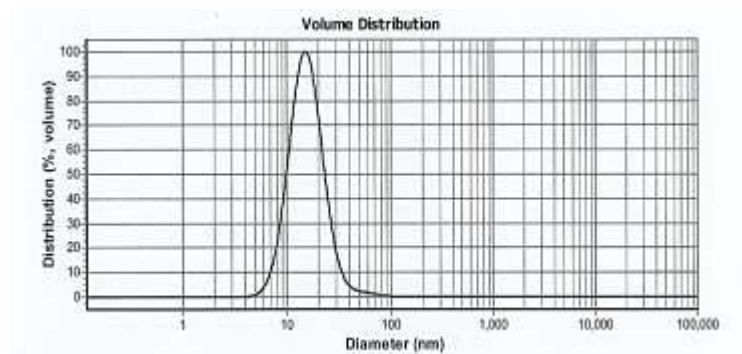


مشخصات فنی

- غلظت: ۰,۵ میلی مولار
- سایز نانوذرات: ۲۰ نانومتر
- درجه خلوص: ۹۸-۹۹٪
- رنگ: شرابی

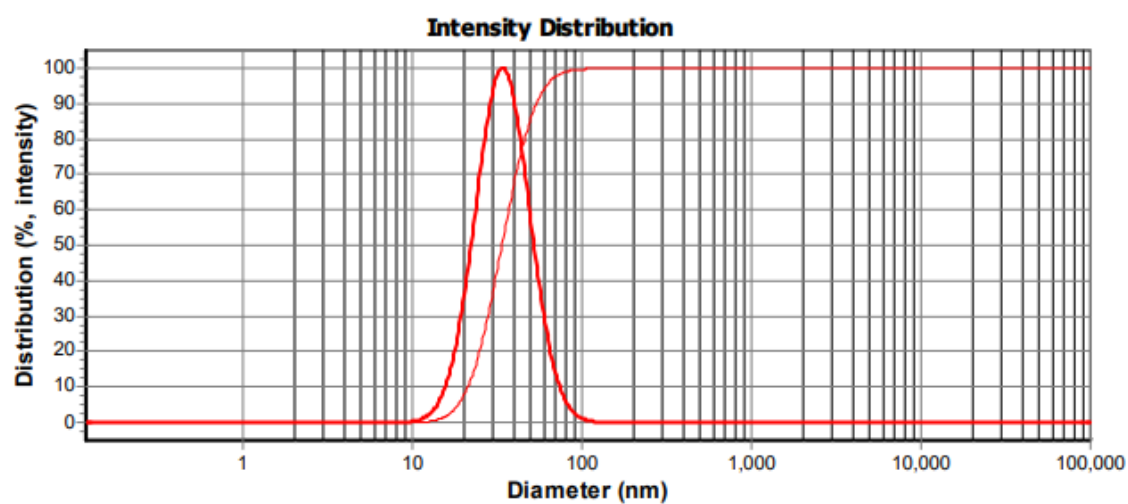
این محصول در حجم ها و غلظت های مختلف موجود است.

آنالیزها



¶ Analysis Results

◦ d(0)	8.77 nm / 8.77 nm / 8.77 nm	◦ d(5)	18.8 nm / 18.8 nm / 18.8 nm	◦ # of Peaks	2
◦ d(10)	21.7 nm / 21.7 nm / 21.4 nm	◦ d(25)	27.0 nm / 27.0 nm / 27.0 nm	34.2 nm	1.47 μ m
◦ d(50)	34.1 nm / 34.1 nm / 34.1 nm	◦ d(75)	43.8 nm / 43.8 nm / 43.8 nm		
◦ d(90)	54.5 nm / 54.5 nm / 54.5 nm	◦ d(95)	62.8 nm / 62.8 nm / 61.8 nm		
◦ d(100)	2.80 μ m / 3.07 μ m / 135 nm				



SAFETY DATA SHEET

GOLD NANOPARTICLES

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Compilation date: 07/01/2016

Revision No: 1

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: GOLD NANOPARTICLES

CAS number: 7440-57-5

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

Use of substance / mixture: For Laboratory Use Only

1.3. Details of the supplier of the safety data sheet

Company name: BBI Solutions OEM Ltd.

Ty Glas Avenue

Cardiff

CF14 5DX

United Kingdom

Tel: +44 (0) 29207 47232

Fax: +44 (0) 29207 41194

Email: info@bbisolutions.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 1382 561000

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: This product has no classification under CLP.

2.2. Label elements

Label elements: This product has no label elements.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: GOLD NANOPARTICLES

CAS number: 7440-57-5

Section 4: First aid measures

[cont...]

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GOLD NANOPARTICLES

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4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes.

Ingestion: Wash out mouth with water. Never give anything by mouth to an unconscious person.
Rinse mouth with water.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: May be harmful if absorbed through skin. May cause respiratory tract irritation

Eye contact: May cause eye irritation

Ingestion: May be harmful if swallowed

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation

Delayed / immediate effects: No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: No data available.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: no data available

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid breathing vapours, mist or gas.

6.2. Environmental precautions

Environmental precautions: No special environmental precautions required

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Sweep up and shovel . Avoid creating dust. Keep in suitable, closed container for disposal

6.4. Reference to other sections

Reference to other sections: Refer to section 13 of SDS.

Section 7: Handling and storage

[cont...]

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7.1. Precautions for safe handling

Handling requirements: Provide appropriate exhaust ventilation at places where dust is formed

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store at 2-8°C Do not freeze

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): For laboratory use only.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Contains no substances with occupational exposure limit values

Respiratory protection: Respiratory protection not required.

Hand protection: Gloves must be inspected before use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with substance. Select appropriate gloves to meet the specifications of standard EN 374

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

Skin protection: Fully buttoned laboratory coat

Environmental: No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Dark red

Odour: No data available

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: Soluble

Boiling point/range°C: 2808

Melting point/range°C: 1063

Flammability limits %: lower: No data available.

upper: No data available.

Flash point°C: No data available.

Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available.

Vapour pressure: No data available.

Relative density: 19.3g/ml

pH: No data available.

VOC g/l: No data available.

[cont...]

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GOLD NANOPARTICLES

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9.2. Other information

Other information: no data available

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data available.

10.2. Chemical stability

Chemical stability: No data available.

10.3. Possibility of hazardous reactions

Hazardous reactions: No data available.

10.4. Conditions to avoid

Conditions to avoid: No data available

10.5. Incompatible materials

Materials to avoid: Halogens. Hydrogen peroxide Ammonia

10.6. Hazardous decomposition products

Haz. decomp. products: No data available.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values: No data available.

Symptoms / routes of exposure

Skin contact: May be harmful if absorbed through skin. May cause respiratory tract irritation

Eye contact: May cause eye irritation

Ingestion: May be harmful if swallowed

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation

Delayed / immediate effects: No data available.

Other information: To the best of our knowledge, the chemical, physical and toxological properties have not been thoroughly investigated

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

[cont...]

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12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Offer surplus and non-recyclable solutions to a licensed disposal company

Disposal of packaging: Dispose of as unused product

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

