

Material Safety Data Sheet Version No.: 3.0(Rev. date :2023-06-09) AccuGoldSol[™] Gold Nano Colloid

1. Product and company identification

- 1.1. Trade name : AccuGoldSol[™] Gold Nano Colloid
- 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemical, Manufacture of substance

1.3. Detail of the supplier of the safety data sheet

Company : Bioneer Corporation

Address: 8-11, Munpyeongseoro, Daedeok-Gu, Daejeon 34302, Republic of Korea

Emergency telephone number : +82-42-930-8591

2. Hazards identification

2.1. Classification of the substance or mixture

Not classified as a hazardous substance

2.2. GHS Label elements

Not classified as a hazardous substance

2.3. Hazards not covered by GHS

none

3. Composition/information on ingredients

- 3.1. Substances : Au
- 3.2. CAS No.
- 3.3. Component Classification Concentration

Colloidal Gold (CAS Number: 7440-57-5) : 0.01%~0.015%

Sodium citrate tribasic dihydrate (CAS Number : 6132-04-3): 0.05~0.15%

Water (CAS Number: 7732-18-5) : 99.84 % ~ 99.94%

4. First aid measures

4.1. In case of eye contact

Flash eyes with water as a precaution

4.2. In case of skin contact

Wash off with soap and plenty of water

4.3. If inhaled

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

4.4. If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

- 4.5. Most important symptom and effects : no data available
- 4.6. Indication of any immediate medical attention and special treatment needed : no data available

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use water spray, dry chemical or carbon dioxide

- 5.2. Special hazards arising from the substance or mixture : no date available
- 5.3. Advice for fire fighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4. Further information : no date available

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

Avoid breathing vapors, mist or gas.

- 6.2. Environmental precautions
 - Do not let product enter drain.
- 6.3. Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal

7. Handling and storage

7.1. Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

Normal measures for preventive fire protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilation place.

8. Exposure controls / personal protection

8.1. Control parameters

Components with workplace control parameters.

8.2. Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

- 8.3. Personal protective equipments
 - Respiratory protection : none
 - Eye/face protection

Use equipment for eye protection tested and approved

- Skin protection

Handle with gloves. Gloves must be inspected prior to use

- Body protection
- Use a Impervious clothing

Choose body protection in relation to its type, to the concentration and amount of dangerous substances,

and to the specific work-place.

9. Physical and chemical properties

- 9.1. Appearance Form : dark red solution
- 9.2. Odor : no data available
- 9.3. Odor threshold : no data available
- 9.4. pH : no data available
- 9.5. Melting point/freezing point : 1063 °C(Gold), 0°C (water)
- 9.6. initial boiling point : 2,808 °C (Gold), 100 °C (water)
- 9.7. Flash point : no data available
- 9.8. Evaporation rate : no date available
- 9.9. Flammability(solid, gas) : no date available
- 9.10. Upper/lower flammability or explosive limits : no date available

- 9.11. Vapor pressure : no date available
- 9.12. Vapor density : no date available
- 9.13. Relative density : approximately 1.0 g/cm3
- 9.14. Water solubility : soluble
- 9.15. Partition coefficient (n-octane/water) : no date available
- 9.16. Auto-ignition temperature : no date available
- 9.17. Decomposition temperature : no date available
- 9.18. Viscosity : no date available
- 9.19. Explosive properties : no date available
- 9,20. Oxidizing properties : no date available

10. Stability and Reactivity

- 10.1. Reactivity : no data available
- 10.2. Chemical stability : Stable under recommended storage conditions.
- 10.3. Possibility of hazardous reactions : no date available
- 10.4. Condition to avoid : no date available
- 10.5. Incompatible materials : Oxygen, Strong oxidizing agent
- 10.6. Hazardous decomposition products

Other decomposition products : no date available

11. Toxicological information

- 11.1. Information on toxicological effects
 - Acute toxicity
 - Skin corrosion/irritation : no date available
 - Serious eye damage/eye irritation : no date available
 - Respiratory or skin sensitization : no data available
 - Germ cell mutagenicity : no date available
 - Carcinogenicity: no data available
- Reproductive toxicity : no data available
 - Specific target organ toxicity-single exposure : no date available



- Specific target organ toxicity-repeated exposure : no date available
- Aspiration hazard : no data available
- Additional Information

RTECS : Not available

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. 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

14.1. UN number		
ADR/RID : -	IMDG : -	IATA : -
14.2. UN proper shipping name		
ADR/RID : Not dar	ngerous goods	IMDG :: Not dangerous goods IATA :: Not dangerous goods
14.3. Transport hazard class		
ADR/RID : -	IMDG : -	IATA : -
14.4. Packaging group		
ADR/RID : -	IMDG : -	IATA : -
14.5. Environmental hazards		
ADR/RID : no	IMDG Marir	ne pollutant : no IATA : no
14.6. Special precautions for user : no data available		

15. Regulatory information

- 15.1. Safety, health and environment regulations/legislation specific for the substance or mixture : no data available
- 15.2. Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16. Other information

- 16.1. List of references
- 16.2. Initial creation date: 2009-02-20
- 16.3. Number of revisions and date of last revision: 3.0 / 2023-06-09
- 16.4. Further information

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