



# SAFETY DATA SHEET

Version 0  
Revision Date 2019-11-05  
Print Date 2019-11-06

## 1. PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT

**Product name** Citrate-coated Gold Nanospheres  
**Product Number** NB-AUCS-01  
**Brand** Nanobrand  
**Product Use** Laboratory chemicals, manufactured substances

### MANUFACTURER

**Company Name** 9220-3553 QUEBEC INC AKA NANOBRAND  
**Company Address** 230 rue Bernard-Belleau, SUITE 123,  
Laval QUEBEC  
H7V 4A9  
**TELEPHONE** 450-686-0111  
**EMERGENCY PHONE** 450-479-6725

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

### GHS Classification

Not a dangerous substance according to GHS

### HMIS Classification

**Health hazard:** 0  
**Flammability:** 0  
**Physical hazards:** 0

## Potential Health Effects

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation..
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation. Prolonged exposure may cause eye damage.
<b>Ingestion</b>	May be harmful if ingested.

## 3.COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	% by mass
Gold (as colloid)	7440-57-5	0,005 – 0,1
Sodium Citrate	6132-04-3	trace
Water	7732-18-5	> 99

## 4.FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### If inhaled

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

### In case of skin contact

Wash the affected area with soap and water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists..

### In case of eye contact

Remove contacts if present. Immediately flush the eyes with water for at least 10-15 minutes. Seek medical attention if irritation persists

### If swallowed

If the person is conscious, rinse their mouth out with water. Never give anything by mouth to an unconscious person..

## 5.FIREFIGHTING MEASURES

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide..

### Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.



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### **Hazardous combustion products**

#### **Explosion data - sensitivity to mechanical impact**

None.

#### **Explosion data - sensitivity to static discharge**

None.

## **6.ACCIDENTAL RELEASE MEASURES**

### **Personal precautions**

Use personal protective equipment. Ensure adequate ventilation.

### **Environmental precautions**

No special environmental precautions required.

### **Methods and materials for containment and cleaning up**

Small spills can be swept up or diluted flushed with water to dilute according to local, state, and federal disposal guidelines. Solid surface should be wiped with a detergent-based cleaner to clean any remaining materials..

## **7.HANDLING AND STORAGE**

### **Precautions for safe handling**

Avoid contact with skin, eyes and clothing. Avoid prolonged or repeat exposure

### **Conditions for safe storage**

Closed container stored at 4-25°C. DO NOT FREEZE. Storage class (TRGS 510): Non Combustible Liquids

## **8.EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Personal protective equipment**

#### **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).

**Hand protection**

Wear protective clothing and gloves.

**Eye protection**

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

**Skin and body protection**

Wear protective clothing and gloves.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Specific engineering controls**

Contains no substances with occupational exposure limit values..

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form</b>	liquid
<b>Colour</b>	red/gold
<b>pH</b>	7.0
<b>Melting point/freezing point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Ignition temperature</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Density</b>	1 g/cm <sup>3</sup>
<b>Water solubility</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Relative vapour density</b>	No data available
<b>Odour</b>	No data available
<b>Odour Threshold</b>	No data available
<b>Evaporation rate</b>	No data available

## 10. STABILITY AND REACTIVITY

### **Chemical stability**

Stable under recommended storage conditions. DO NOT FREEZE.

### **Possibility of hazardous reactions**

No data available

### **Conditions to avoid**

No data available

### **Materials to avoid**

No data available..

### **Hazardous decomposition products**

Hazardous decomposition products may be formed under fire conditions –See section 5 the event of fire. Nature of decomposition products not known.

### **Other decomposition products -**

No data available

## 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity**

#### **Oral LD50**

No data available

#### **Inhalation LC50**

No data available

#### **Dermal LD50**

No data available

### **Other information on acute toxicity**

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**

**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.

**Reproductive toxicity**

No data available

**Teratogenicity**

No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

No data available

**Aspiration hazard**

No data available

**Potential health effects**

**Inhalation**

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

**Ingestion**

May be harmful if swallowed.

**Skin**

May be harmful if absorbed through skin. May cause skin irritation..

**Eyes**

May cause eye irritation.

**Signs and Symptoms of Exposure**

Exposure to gold compounds can cause contact dermatitis. The toxicological properties have not been thoroughly investigated. The data supplied are for closely related compounds. No data available.

**Synergistic effects**

No data available

## 12. ECOLOGICAL INFORMATION

### Toxicity

No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other Adverse

No data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Dispose of according to local, state and federal regulations

## 14. TRANSPORT INFORMATION

### DOT (US)

Not dangerous goods.

### TDG

Not dangerous goods.

### IATA

Not dangerous goods.

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### Further information

SHIPPING NAME (CFR): Non-hazardous.

SHIPPING NAME (IATA): Non-hazardous.



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### **15.REGULATORY INFORMATION**

#### **WHMIS (2015)**

Not dangerous goods.

### **16.OTHER INFORMATION**

#### **Further information**

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.

Nanobrand and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.