1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Gold nanoparticles

Product Numbers: A, CC, CI, AC, 10, 11, 12

Brand: Nanopartz Inc.

Supplier: Nanopartz Inc.
146 Barberry Pl.
Loveland CO 80537
USA

Telephone: +1 844-334-5555
Fax: +1 866-811-6266

Emergency Phone # (For both supplier and manufacturer): +1 844-334-5555

Preparation Information: Nanopartz Inc.

2. HAZARDS

IDENTIFICATION

Emergency Overview

OSHA Hazards
No known OSHA hazards
Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

HMIS Classification
Health hazard: 0
Flammability: 0
Physical hazards: 0

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: AU NP, Gold Colloid

Formula: Au
Molecular Weight: 196.97 g/mol

No ingredients are hazardous according to OSHA criteria.
4. FIRST AID MEASURES
   
   If inhaled
   If breathed in, move person into fresh air. If not breathing, give artificial respiration. **In case of skin contact**
   Wash off with soap and plenty of water.

   **In case of eye contact**
   Flush eyes with water as a precaution.

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

5. FIREFIGHTING MEASURES
   
   **Conditions of flammability**
   Not flammable or combustible.

   **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 fire fighting if necessary.

   **Hazardous combustion products**
   None.

6. ACCIDENTAL RELEASE MEASURES
   
   **Personal precautions**
   Avoid breathing vapors, mist or gas.

   **Environmental precautions**
   No special environmental precautions required.

   **Methods and materials for containment and cleaning up**
   Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE
   
   **Conditions for safe storage**
   Keep container tightly closed in a dry and well-ventilated place.

   **Recommended storage temperature**
   2-8 degC.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
   
   Contains no substances with occupational exposure limit values.

   **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**
   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.

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

**Hygiene measures**
General industrial hygiene practice.

**Appearance**

- **Form**: liquid
- **Colour**: no data available

**Safety data**

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<th>Property</th>
<th>Value</th>
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<td>Evaporation Rate</td>
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</table>

**10. STABILITY AND REACTIVITY**

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of hazardous reactions**
no data available

**Conditions to avoid**
no data available

**Materials to avoid**
no data available

**Hazardous decomposition products**
None

**11. TOXICOLOGICAL**

**INFORMATION Acute toxicity**

- **Oral LD50**
  no data available

- **Inhalation LC50**
  no data available

- **Dermal LD50**
  no data available

**Skin corrosion/irritation**
no data available

**Serious eye damage/eye irritation**
Eyes: no data available

**Respiratory or skin sensitization**
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.

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

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

**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.

**Synergistic effects**
no data available

**Additional Information**
RTECS: Not 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

**PBT and vPvB assessment**
13. DISPOSAL CONSIDERATIONS

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

**Contaminated packaging**
Dispose of unused product.

14. TRANSPORT INFORMATION

**DOT (US)**
Not dangerous goods

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

15. REGULATORY INFORMATION

**OSHA Hazards**
No known OSHA hazards

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

**SARA 313 Components**
SARA 313: 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

**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.