

Print Date  
May-01-2018

Revision Date  
May-01-2018

Revision Number  
1.1

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Product identifier**

Product code **SIPM530**  
Product name **SIPM530 Pale Gold Powder**  
Product category **Metallic Powder or Paste**

**Other means of identification**

Synonyms None

**Recommended use of the chemical and restrictions on use**

Recommended use Printing operations

**Details of the supplier of the safety data sheet**

|                         |                            |
|-------------------------|----------------------------|
| UNITED STATES           | UNITED KINGDOM             |
| Nazdar Company          | Nazdar Limited             |
| 8501 Hedge Lane Terrace | Barton Road                |
| Shawnee, KS 66227       | Heaton Mersey              |
| Tel: +001-913-422-1888  | Stockport, England SK4 3EG |
| Tel: +001-800-677-4657  | Tel: +44 161 442 2111      |
| Fax: +001-913-422-2294  |                            |
| www.nazdar.com          |                            |

**Emergency telephone number**

USA: Chemtrec: +001-800-424-9300  
Outside USA: Chemtrec: +001-703-527-3887  
24 Hour Emergency Phone Number

**2. HAZARDS IDENTIFICATION**

**Classification**

|                          |                     |
|--------------------------|---------------------|
| Acute aquatic toxicity   | Category 1 - (H400) |
| Chronic aquatic toxicity | Category 1 - (H410) |

**Label elements**



**Signal Word**  
Warning

**Hazard Statements**

H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements**

P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Hazards not otherwise classified (HNOC)**

No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture

| Component                | CAS-No    | Weight % | Trade Secret | Note |
|--------------------------|-----------|----------|--------------|------|
| Copper                   | 7440-50-8 | 60 - 100 | *            |      |
| Zinc powder (stabilized) | 7440-66-6 | 5 - 10   | *            |      |
| Silicon Dioxide          | 7631-86-9 | 1 - 5    | *            |      |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### Description of first aid measures

|                       |   |
|-----------------------|---|
| <b>General Advice</b> | Show this safety data sheet to the doctor in attendance.  |
| <b>Eye Contact</b>    | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists. |
| <b>Skin Contact</b>   | Wash off immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation (redness, rash, blistering) develops, get medical attention.                |
| <b>Inhalation</b>     | Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.                          |
| <b>Ingestion</b>      | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.   |

#### Most important symptoms and effects, both acute and delayed

None under normal use conditions.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable Extinguishing Media

No information available.

#### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions. Powdered material may form explosive dust-air mixture.

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray. Sealed containers may rupture when heated.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin and clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

**Methods and material for containment and cleaning up**

Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use only non-sparking tools. Clean contaminated surface thoroughly.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Handling** Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Keep out of the reach of children.

**Incompatible Products** Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure limits**

| Component           | ACGIH TLV                       |
|---------------------|---------------------------------|
| Copper<br>7440-50-8 | TWA: 0.2 mg/m <sup>3</sup> fume |

| Component           | OSHA PEL  |
|---------------------|---|
| Copper<br>7440-50-8 | TWA: 0.1 mg/m <sup>3</sup> fume<br>TWA: 1 mg/m <sup>3</sup> dust and mist |

| Component                    | OSHA PEL (vacated)                             |
|------------------------------|--|
| Copper<br>7440-50-8          | TWA: 0.1 mg/m <sup>3</sup> Cu dust, fume, mist |
| Silicon Dioxide<br>7631-86-9 | TWA: 6 mg/m <sup>3</sup>                       |

| Component           | Ontario TWAEV   |
|---------------------|---|
| Copper<br>7440-50-8 | TWA: 0.2 mg/m <sup>3</sup> fume<br>TWA: 1 mg/m <sup>3</sup> dust and mist |

| Component           | Mexico OEL (TWA)   |
|---------------------|--|
| Copper<br>7440-50-8 | TWA/VLE-PPT: 0.2 mg/m <sup>3</sup> Cu fume<br>TWA/VLE-PPT: 1 mg/m <sup>3</sup> Cu dust and mist<br>STEL/PPT-CT: 2 mg/m <sup>3</sup> Cu fume<br>STEL/PPT-CT: 2 mg/m <sup>3</sup> Cu dust and mist |

**Appropriate engineering controls**

**Engineering Measures** Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles). If splashes are likely to occur. Wear suitable face shield. Ensure that eyewash stations and safety showers are close to the

workstation location.

**Skin Protection**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory Protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

|                       |          |                       |                          |
|-----------------------|----------|-----------------------|--------------------------|
| <b>Physical State</b> | Powder   | <b>Appearance</b>     | Gold                     |
| <b>Odor</b>           | Odorless | <b>Odor Threshold</b> | No information available |

| <u>Property</u>                        | <u>Values</u> | <u>Remarks • Method</u> |
|--|---------------|-------------------------|
| pH                                     |               | No data available       |
| Melting Point / Freezing Point         |               | No data available       |
| Boiling Point / Boiling Range          |               | Not applicable          |
| Flash Point                            |               | Not Applicable          |
| Evaporation rate                       |               | No data available       |
| Flammability Limit in Air              |               |                         |
| Upper flammability limit               |               | No data available       |
| Lower flammability limit               |               | No data available       |
| Vapor Pressure                         |               | No data available       |
| Vapor Density                          |               | No data available       |
| Specific Gravity                       | 8.56          |                         |
| Water Solubility                       |               | No data available       |
| Solubility in other solvents           |               | No data available       |
| Partition coefficient: n-octanol/water |               | No data available       |
| Autoignition Temperature               |               | No data available       |
| Decomposition temperature              |               | No data available       |
| Kinematic viscosity                    |               | No data available       |
| Dynamic viscosity                      |               | No data available       |

**Explosive Properties** No data available

**Oxidizing Properties** No data available

**Other Information**

**Photochemically Reactive** No  
**Weight Per Gallon (lbs/gal)** 71.4

| VOC by weight %<br>(less water) | VOC by volume %<br>(less water) | VOC lbs/gal<br>(less water) | VOC grams/liter<br>(less water) |
|---------------------------------|---------------------------------|-----------------------------|---------------------------------|
| 0-1                             | 0-1                             | 0-1                         | 0-1                             |

## 10. STABILITY AND REACTIVITY

**Reactivity**

No information available.

**Chemical stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition.

**Incompatible materials**

Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. |
| <b>Eye Contact</b>  | Specific test data for the substance or mixture is not available. |
| <b>Skin Contact</b> | Specific test data for the substance or mixture is not available. |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. |

| Component                    | Oral LD50            |
|------------------------------|----------------------|
| Silicon Dioxide<br>7631-86-9 | > 5000 mg/kg ( Rat ) |

| Component                    | LD50 Dermal             |
|------------------------------|-------------------------|
| Silicon Dioxide<br>7631-86-9 | > 2000 mg/kg ( Rabbit ) |

| Component                    | Inhalation LC50        |
|------------------------------|------------------------|
| Silicon Dioxide<br>7631-86-9 | > 2.2 mg/L ( Rat ) 1 h |

**Information on toxicological effects**

**Symptoms** Specific test data for the substance or mixture is not available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

|                                  |  |
|----------------------------------|--|
| <b>Skin corrosion/irritation</b> | Specific test data for the substance or mixture is not available.                                      |
| <b>Eye damage/irritation</b>     | Specific test data for the substance or mixture is not available.                                      |
| <b>Irritation</b>                | Specific test data for the substance or mixture is not available.                                      |
| <b>Corrosivity</b>               | Specific test data for the substance or mixture is not available.                                      |
| <b>Sensitization</b>             | Specific test data for the substance or mixture is not available.                                      |
| <b>Mutagenic Effects</b>         | Specific test data for the substance or mixture is not available.                                      |
| <b>Carcinogenic effects</b>      | Specific test data for the substance or mixture is not available.                                      |
| <b>Reproductive Effects</b>      | Specific test data for the substance or mixture is not available.                                      |
| <b>STOT - single exposure</b>    | Specific test data for the substance or mixture is not available.                                      |
| <b>STOT - repeated exposure</b>  | Specific test data for the substance or mixture is not available.                                      |
| <b>Chronic Toxicity</b>          | Specific test data for the substance or mixture is not available                                       |
| <b>Aspiration hazard</b>         | Specific test data for the substance or mixture is not available.                                      |
| <b>Carcinogenicity</b>           | This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP. |

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document mg/kg

**ATEmix (dermal)** 55,556.00 mg/kg mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Specific test data for the substance or mixture is not available. Very toxic to aquatic life with long lasting effects. (based on components).

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Component                             | Algae/aquatic plants   |
|---------------------------------------|--|
| Copper<br>7440-50-8                   | 0.0426 - 0.0535: 72 h Pseudokirchneriella subcapitata mg/L EC50 static<br>0.031 - 0.054: 96 h Pseudokirchneriella subcapitata mg/L EC50 static |
| Zinc powder (stabilized)<br>7440-66-6 | 0.11 - 0.271: 96 h Pseudokirchneriella subcapitata mg/L EC50 static<br>0.09 - 0.125: 72 h Pseudokirchneriella subcapitata mg/L EC50 static     |
| Silicon Dioxide<br>7631-86-9          | = 440: 72 h Pseudokirchneriella subcapitata mg/L EC50  |

| Component                             | Fish   |
|---------------------------------------|--|
| Copper<br>7440-50-8                   | 0.0068 - 0.0156: 96 h Pimephales promelas mg/L LC50<br>0.2: 96 h Pimephales promelas mg/L LC50 flow-through<br>0.8: 96 h Cyprinus carpio mg/L LC50 static<br>0.3: 96 h Pimephales promelas mg/L LC50 static<br>0.052: 96 h Oncorhynchus mykiss mg/L LC50 flow-through<br>0.3: 96 h Cyprinus carpio mg/L LC50 semi-static<br>0.112: 96 h Poecilia reticulata mg/L LC50 flow-through<br>1.25: 96 h Lepomis macrochirus mg/L LC50 static  |
| Zinc powder (stabilized)<br>7440-66-6 | 30: 96 h Cyprinus carpio mg/L LC50<br>0.41: 96 h Oncorhynchus mykiss mg/L LC50 static<br>0.211 - 0.269: 96 h Pimephales promelas mg/L LC50 semi-static<br>0.24: 96 h Oncorhynchus mykiss mg/L LC50 flow-through<br>0.59: 96 h Oncorhynchus mykiss mg/L LC50 semi-static<br>7.8: 96 h Cyprinus carpio mg/L LC50 static<br>3.5: 96 h Lepomis macrochirus mg/L LC50 static<br>2.16 - 3.05: 96 h Pimephales promelas mg/L LC50 flow-through<br>2.66: 96 h Pimephales promelas mg/L LC50 static<br>0.45: 96 h Cyprinus carpio mg/L LC50 semi-static |
| Silicon Dioxide<br>7631-86-9          | 5000: 96 h Brachydanio rerio mg/L LC50 static  |

| Component                             | Crustacea  |
|---------------------------------------|--|
| Copper<br>7440-50-8                   | 0.03: 48 h Daphnia magna mg/L EC50 Static          |
| Zinc powder (stabilized)<br>7440-66-6 | 0.139 - 0.908: 48 h Daphnia magna mg/L EC50 Static |
| Silicon Dioxide<br>7631-86-9          | 7600: 48 h Ceriodaphnia dubia mg/L EC50            |

### Persistence and Degradability

No information available.

### Bioaccumulation

No information available

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Waste Disposal Methods**

Contain and dispose of waste according to local regulations.

**Contaminated Packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

#### 14. TRANSPORT INFORMATION

##### DOT

**UN/ID no.** UN3077  
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s. (Copper metal powder)  
**Hazard Class** 9  
**Packing Group** III

##### ICAO / IATA / IMDG / IMO

**UN/ID no.** UN3077  
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s. (Copper metal powder)  
**Hazard Class** 9  
**Packing Group** III

#### 15. REGULATORY INFORMATION

##### International Inventories

All components are listed on the TSCA Inventory. For further information, please contact: Supplier (manufacturer/importer/downstream user/distributor).

##### U.S. Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Component                | CAS-No    | Weight % | SARA 313 - Threshold Values |
|--------------------------|-----------|----------|-----------------------------|
| Copper                   | 7440-50-8 | 60 - 100 | 1.0                         |
| Zinc powder (stabilized) | 7440-66-6 | 5 - 10   | 1.0                         |

*Zinc is reportable under SARA313 ONLY if it is a fume or dust form. Fume or dust refers to dry forms but does not refer to "wet" forms such as use in a solution or slurry.*

##### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

##### U.S. State Regulations

| Component                             | Massachusetts Right To Know |
|---------------------------------------|-----------------------------|
| Copper<br>7440-50-8                   | X                           |
| Zinc powder (stabilized)<br>7440-66-6 | X                           |
| Silicon Dioxide<br>7631-86-9          | X                           |

| Component                    | Minnesota Right To Know |
|------------------------------|-------------------------|
| Copper<br>7440-50-8          | X                       |
| Silicon Dioxide<br>7631-86-9 | X                       |

| Component                             | New Jersey<br>Right To Know |
|---------------------------------------|-----------------------------|
| Copper<br>7440-50-8                   | X                           |
| Zinc powder (stabilized)<br>7440-66-6 | X                           |
| Silicon Dioxide<br>7631-86-9          | X                           |

| Component                             | Pennsylvania<br>Right To Know |
|---------------------------------------|-------------------------------|
| Copper<br>7440-50-8                   | X                             |
| Zinc powder (stabilized)<br>7440-66-6 | X                             |
| Silicon Dioxide<br>7631-86-9          | X                             |

**California Prop. 65**

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

**Canada**

| Component                             | NPRI - National Pollutant Release Inventory |
|---------------------------------------|---|
| Copper<br>7440-50-8                   | Part 1, Group A Substance                   |
| Zinc powder (stabilized)<br>7440-66-6 | Part 1, Group A Substance                   |

## 16. OTHER INFORMATION

|              |               |                     |                   |                            |
|--------------|---------------|---------------------|-------------------|----------------------------|
| <b>HMIS:</b> | <b>Health</b> | <b>Flammability</b> | <b>Reactivity</b> | <b>Personal Protection</b> |
|              | 1 *           | 3                   | 3                 | X                          |

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                                  |
|---------|----------------------------------|
| TWA     | TWA (time-weighted average)      |
| STEL    | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value              |

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

- A1 - Known Human Carcinogen
- A2 - Suspected Human Carcinogen
- A3 - Animal Carcinogen

**IARC: (International Agency for Research on Cancer)**

- Group 1 - Carcinogenic to Humans
- Group 2A - Probably Carcinogenic to Humans
- Group 2B - Possibly Carcinogenic to Humans

**NTP: (National Toxicity Program)**

- Known - Known Carcinogen
- Reasonably Anticipated to be a Human Carcinogen

**OSHA: (Occupational Safety & Health Administration)**

- X - Present

**Revision Date** May-01-2018

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**