

## **Section 1 - Product and Company Identification**

### **1.1 Product identifiers**

Product name: **Nano-SiO<sub>2</sub>**  
Catalog code: tlr1-sio-2  
CAS number: 7631-86-9

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

Identified use: Laboratory chemicals

Disclaimer: All InvivoGen products are supplied for research and laboratory use only. Not for drug, household or other uses.

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

Company: InvivoGen USA, 10515 Vista Sorrento Parkway  
San Diego, California 92121, USA  
(+1) 888 457 5873  
  
InvivoGen Europe, 5 rue Jean Rodier  
31400 Toulouse, France  
+33 (0) 5 62 71 69 39  
  
InvivoGen Asia, Unit 106, 1F,  
15W Phase 3 Hong Kong Science Park,  
Pak Shek Kok, Hong Kong  
+852 3622 3480

**1.4 Emergency telephone number:** ORFILA (INRS): +33 (0)1 45 42 59 59

## **Section 2 – Hazards Identification**

**2.1 Classification of substance according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] and GHS**  
Specific target organ toxicity - repeated exposure (Category 1), H372

**2.2 Label elements according to Regulation (EC) No 1272/2008 [CLP] and GHS**

Pictogram



Signal word: **Danger**

Hazard statement(s)  
H372 Causes damage to lungs through prolonged or repeated exposure by inhalation.

Precautionary statement(s)  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash skin thoroughly after handling.  
P314 Get medical advice/attention if you feel unwell.  
P501 Dispose of contents/container to an approved waste disposal.

### 2.3 Other hazards - none

## **Section 3 – Composition/Information on Ingredient**

### 3.1 Substances

Synonyms: Nanoparticles of silica dioxide

Formula: SiO<sub>2</sub>

Molecular weight: 60.08 g/mol

CAS number: 7631-86-9

## **Section 4 – First Aid Measures**

### 4.1 Description of 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, remove to fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact:** Wash skin with soap and plenty of water. Consult a physician.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

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

No data available

## **Section 5 – Fire Fighting Measures**

### 5.1 Extinguishing media

**Suitable extinguishing media:** Use water spray, carbon dioxide, dry chemical powder or appropriate foam.

### 5.2 Specific hazards arising from the chemical

No data available

### 5.3 Special Firefighting Procedures

Wear self-contained breathing apparatus for firefighting if necessary.

## **Section 6 – Accidental Release Measures**

### 6.1 Personal precautions, protective equipment and emergency

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13.

## **Section 7 – Handling and Storage**

### **7.1 Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: Store at room temperature (15-25°C).

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## **Section 8 – Exposure Controls/PPE**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

General industrial hygiene practice.

#### **Personal protective equipment**

##### **Eye/face protection**

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

##### **Skin 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.

##### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### **Control of environmental exposure**

Do not let product enter drains.

## **Section 9 – Physical/Chemical Properties**

### **9.1 Information on basic physical and chemical properties**

#### **Appearance**

Physical state: Solid

Color: White

#### **Safety Data**

Odor: No data available

Odor threshold: No data available

pH: No data available  
Melting point/freezing point: No data available  
Initial boiling point and boiling range: No data available  
Flash point: No data available  
Evaporation rate: No data available  
Flammability: No data available  
Upper/lower flammability or explosive limits: No data available  
Vapor pressure: No data available  
Relative density: No data available  
Solubility in water: No data available  
Partition coefficient (n-octanol/water): No data available  
Autoignition temperature: No data available  
Decomposition temperature: No data available  
Viscosity: No data available

## 9.2 Other safety information

no data available

## Section 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 data available  
**10.4 Conditions to avoid:** No data available  
**10.5 Incompatible materials:** No data available  
**10.6 Hazardous decomposition products:** No data available  
**In case of fire:** See section 5

## Section 11 – Toxicological Information

### 11.1 Information on toxicological effects

#### 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/irritation:** No data available

**Respiratory or skin sensitization:** No data available

#### Germ cell mutagenicity:

Carcinogenicity - Rat - Inhalation

Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax.

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Silica dioxide)

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

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

Aspiration hazard: No data available

Additional Information : RTECS VV7310000

## **Section 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 Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required or not conducted.

**12.6 Other adverse effects:** No data available

## **Section 13 – Disposal Considerations**

### **13.1 Waste treatment methods**

**Product:** Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Must not be disposed of together with household garbage.

**Contaminated Packaging:** Dispose of as unused product.

## **Section 14 – Transport Information**

### **14.1 UN number**

ADR/RID: - DOT (US): - IMDG: - IATA: -

### **14.2 UN proper shipping name**

not dangerous goods

### **14.3 Transport hazard class(es)**

ADR/RID: - DOT (US): - IMDG: - IATA: -

### **14.4 Packaging group**

ADR/RID: - DOT (US): - IMDG: - IATA: -

### **14.5 Environmental hazards**

ADR/RID: no DOT (US): no IMDG Marine pollutant: no IATA: no

### **14.6 Special precautions for user**

no data available

### **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not applicable

## **Section 15 – Regulatory Information**

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

no data available

### **15.2 Chemical Safety Assessment**

no data available

## **Section 16 – Other Information**

The information contained in this SDS relates only to the material(s) designated and does not relate to use(s) in combination with any other material, process(es) and/or chemical reaction(s). InvivoGen provides this information in good faith and is based on our present knowledge. This SDS is provided without warranty of any kind. The recipient is responsible for ensuring that, where applicable, existing laws and guidelines are observed.