

## MATERIAL SAFETY DATA SHEET

**Revision Number: 2.3**  
**Revision Date: September 28, 2015**

### Section 1 – Product and Company Information

Product Name: Polystyrene nanoparticles (Negative)  
Unit Size: 25 mL  
Manufacturer/Supplier: Sciventions Inc., 60 St. George Street, Suite 331, Toronto, ON, M5S 1A7, Canada  
Phone: (647) 947-4866  
Web: <http://www.sciventions.com>  
Technical Assistance: [support@sciventions.com](mailto:support@sciventions.com)  
Sales enquiries: [sales@sciventions.com](mailto:sales@sciventions.com)

### Section 2 – Composition, Information on Ingredients:

Component A: Water  
CAS 7732-18-5, 95%+ by volume

Component B: Polystyrene (as nanoparticles)  
CAS No: 9003-53-6, 5% by weight

Component C: Poly(styrenesulphonate)  
CAS No: 25704-18-1, <1% by weight

### Section 3 – Hazards Identification

Emergency Overview:  
Colour: Milky white  
Physical form: Liquid

Major Health Hazards: Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

Physical Hazards: None.

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.  
Skin contact: May be harmful if absorbed through skin. May cause skin irritation.

Eye contact: May cause irritation.  
Ingestion: Large oral doses may be harmful.

Carcinogen status:

OSHA: No.  
NTP: No.  
IARC: Group 3 (Not classifiable as to carcinogenicity in humans).

### Section 4 – First Aid Measures:

Eye contact: If this chemical gets into the eyes, remove any contact lenses at once and irrigate immediately for at least 15 minutes, occasionally lifting upper and lower lids. Seek medical if irritation persists.  
Skin contact: If this chemical contacts the skin, remove contaminated clothing and wash immediately with soap and water. Seek medical attention if irritation develops.  
Inhalation: If this chemical has been inhaled, remove from exposure, begin rescue breathing (using universal precautions) if breathing has stopped and CPR if heart action has stopped. Get medical attention for any difficulty in breathing.  
Ingestion: If this chemical has been swallowed, get medical attention. Give large quantities of water and induce vomiting. Do not make an unconscious person vomit.

### Section 5 – Fire Fighting Measures

This chemical is non-flammable. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Wear self contained breathing apparatus for firefighting if necessary. Hazardous decomposition products formed under fire conditions. - Carbon oxides

### Section 6 – Accidental Release Measures

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Absorb spill onto an appropriate material.

## Section 7 – Handling and Storage

For improved performance, store at 2-8°C away from sunlight. Use appropriate laboratory work practices, including wearing of laboratory coats, gloves, and protective eyewear.

## Section 8 - Exposure Controls/Personal Protection:

Contains no substances with occupational exposure limit values.

### *Protective Equipment:*

Wear appropriate gloves, protective clothing, and eyewear. Emergency eye wash station and quick drench shower should be provided in the immediate work area as per the ANSI Z358.1 guidelines.

## Section 9 – Physical and Chemical Properties

Physical State: Liquid

Colour: Milky White

Odor: Unknown.

Boiling Point: 100°C

Freezing Point: 0°C

Vapour pressure: N/A

Specific gravity (water = 1): ~ 1

pH: ~ 3 - 4

## Section 10 – Reactivity

Chemical stability: Stable if used according to specifications.

Conditions to avoid: no data available

Incompatible Materials: no data available

Decomposition products: Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section 11 – Toxicological information:

Acute toxicity

### Short Term Exposure:

Skin: May cause skin irritation.

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Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May be harmful if inhaled, material may be irritating to mucous membranes and upper respiratory tract.

## Section 12 – Ecological Information:

Do not allow material to be released to the environment in any form without proper permits and waste-disposal precautions.

## Section 13 – Transportation Information:

U.S. DOT: Not dangerous goods

Canadian Transportation of Dangerous Goods: Not dangerous goods

## Section 14 – Disposal:

Contact a licensed professional waste disposal service to dispose of this material. Dispose in accordance with all local, state/provincial and federal regulations.

## Section 15 – Regulatory Information:

Not WHMIS controlled.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## Section 16 – Other Information:

Pohanish, R.P. (2002). Sittig's Handbook of Toxic and Hazardous Chemicals and Carcinogens (4th Edition). William Andrew Publishing/Noyes.

available at:

<http://www.knovel.com/knovel2/Toc.jsp?BookID=421&VerticalID=0>

CCOHS information available at:

<http://ccinfoweb.ccohs.ca/>

Canadian WHMIS reference manual

NIOSH Pocket guide to chemical hazards available at  
<http://www.cdc.gov/niosh/npg/search.html>

#### LEGAL NOTICE

Sciventions Inc. requests all users of this product to study this Material Safety Data Sheet (MSDS) and become aware of all product hazards and safety information. The data in this MSDS relate only to the specific product designated herein and do not relate to use of such product in combination with any other material or in any process. To promote the safe use of this product, all users should notify their employees, agents and contractors of the information in this MSDS and any other product hazards and safety information.

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