

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

Product Name:	Silica Microsphere Suspension		
Product Content:	Amorphous silicon dioxide microspheres in water		
Company Identification	Microgenics Corporation	Company Phone Number	(510) 979-5000
Office Address	46360 Fremont Blvd.	Emergency Phone Number	(510) 979-5000
City, State, Zip Code	Fremont, CA 94538	CHEMTREC Phone Number, US	(800) 424-9300
Country	USA	CHEMTREC Phone Number, Europe	(202) 483-7616

**SECTION 2 - HAZARD IDENTIFICATION**

CAUTION! May cause lung irritation if inhaled. By normal use the product is not regarded as hazardous to health. The product is not classified as flammable or harmful to the environment; may cause eye, skin, digestive track, and respiratory track irritation. The toxicological properties of this material have not been fully investigated. This product is not classified as dangerous in accordance with Directive 1999/45/EC or 67/548/EEC

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

Component Name	CAS Number:	Percentage:	EINECS/ELINCS
Spherical silica (amorphous)	7631-86-9	1 - 2	418-260-2
Water	7732-18-5	98-99	231-791-2

Component comments have no OSHA, Canadian, or EU hazardous ingredients above applicable threshold.

**SECTION 4 - FIRST AID MEASURES**

**EYE CONTACT:** Flush thoroughly with water for at least 15 minutes. If an irritation develops, seek medical advice.  
**SKIN CONTACT:** In case of contact promptly remove clothes, wash area with soap and flush with plenty of water. If an irritation develops, seek medical advice.  
**INHALATION:** Remove to fresh air and seek medical advice.  
**INGESTION:** Give one to two glasses of water and seek medical advice.

**SECTION 5 - FIRE FIGHTING MEASURES**

**FLAMMABLE PROPERTIES:** Not considered flammable or explosive. NFPA/HMIS Rating (estimated): Health: 1; Flammability: 0; Instability: 0  
**PROTECTION FOR FIREFIGHTERS:** Use extinguishing media appropriate for surrounding fire (water, foam, vaporizing liquid or multipurpose dry chemical).

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Areas covered with spilled microspheres may be slippery. If material is spilled or released, cordon off the area. Collect material by wiping the spill area with a paper towel or disposable wipe, and place materials into an appropriate container. Avoid inhaling fine particle dust. Discard collected material in containers suitable for proper disposal

**SECTION 7 - HANDLING AND STORAGE**

Keep tightly sealed to prevent contamination; store at room temperature in a dry area. Avoid damaging or puncturing containers. When creating aerosols of fine particles use minimal and directional (away from the user) airflow

**SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION**

Occupational Exposure Limits /Chemical Name – Silica Microsphere

OSHA TWA/8 hr	Cal/OSHA TWA/8 hr	ACGIH TLV TWA/8 hr	AIHA	NIOSH LDH/TWA
20 mppcf * or 80mg/m <sup>3</sup> % SiO <sub>2</sub>	~ 6 mg/m <sup>3</sup>	10mg/m <sup>3</sup> – total dust	Not listed	3000mg/m <sup>3</sup> /6mg/m <sup>3</sup>

**EXPOSURE GUIDELINES:** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. Safety glasses with side shields are suggested  
**ENGINEERING CONTROLS:** Use minimal and directional (away from the user) airflow to minimize worker exposure  
**SKIN PROTECTION:** Wear appropriate protective gloves to prevent skin exposure. No skin irritation expected  
**RESPIRATORY PROTECTION:** Respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149.  
**GENERAL HYGIENE CONSIDERATIONS:** Wear appropriate protective clothing to prevent skin exposure  
**SYSTEMIC:** Acute: If inhaled in large quantities, may cause lung irritation  
 Chronic: If inhaled in large quantities, may cause lung irritation

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

BOILING POINT:	100 °C (as water)	SOLUBILITY IN WATER:	insoluble	FLASH POINT:	N/A
MELTING POINT:	0 °C (as water)	EVAPORATION RATE:	N/A	FLAMMABLE PROPERTIES:	N/A
PHYSICAL STATE:	solid	VAPOR PRESSURE:	N/A	AUTO IGNITION TEMP:	N/A
VAPOR DENSITY:	N/A	pH:	5-8	DECOMPOSITION:	N/A
APPEARANCE, COLOR, ODOR:	White to clear liquid, no odor	Kow:	N/A	SUSPENSION DENSITY:	~1 g/cm <sup>3</sup>
		PARTICLE DENSITY:	1.5-2.0 g/cm <sup>3</sup>		

**SECTION 10 - STABILITY AND REACTIVITY**

**STABILITY:** Stable at room temperature in closed containers under normal storage and handling conditions  
**INCOMPATIBILITY:** Organic solvents; product should not be suspended in alcohol or other organic solvents  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Not known  
**HAZARDOUS POLYMERIZATION:** Will not occur

**SECTION 11 - TOXICOLOGICAL INFORMATION**

CAS# 7631-86-9 Oral, Rat: LD50≥5000 mg/kg, Inhalation, Rat: LD50≥2.2 mg/L 1H, Dermal, Rabbit: LD50≥2000 mg/kg

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY: Material is not considered to be a reproductive or developmental toxicant

CARCINOGENICITY: Material is not listed by NTP, ACGIH, IARC or OSHA as a carcinogen. For more information refer to Section 2. Hazards identification

**SECTION 12 - ECOLOGICAL INFORMATION**

CAS# 7631-86-9

ECOTOXICITY 72hrEC<sub>50</sub> Selenastrum capricomutum; 440mg/L; 96hr LC<sub>50</sub> Barchydanio rerio: 5000 mg/L; 48hr EC<sub>50</sub> Ceriodaphnia dubia: 7600 mg/LPERSISTENCE/DEGRADATION *No information found*BIOACCUMULATION/ACCUMULATION *No information found*

MOBILITY IN ENVIRONMENTAL MEDIA Microspheres are insoluble in water

ENVIRONMENTAL Not classified as harmful to the environment

OTHER ADVERSE EFFECTS *No information found***SECTION 13 - DISPOSAL CONSIDERATIONS**

Dispose of any waste residues according to prescribed federal, state, and local guidelines (e.g., to an appropriately permitted chemical waste incinerator).

None of the components are on RCRA P&amp; RCRA U Series Wastes list. EWC waste code 18 01 05 discard as chemicals and medicines

Other Information: According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used

**SECTION 14 - TRANSPORTATION INFORMATION**

HAZARD CLASS: Not classified per US DOT, TDG, UNECE, ADR, ADN, IATA, ICAO, RID, IMDG/IMO, OTIF, Mexico

**SECTION 15 - REGULATORY INFORMATION**

CAS# 7631-86-9

TSCA 8(b)	SARA 302	SARA 313	CERCLA	RCRA 261.33	TSCA 8(d)	TSCA 12(b)	FIFRA	CWC	SARA 311/312	EPICRA	CAA-SNAP	FDA	USDA
yes	no	no	no	no	no	no	yes	no	no	no	no	yes	yes

CAS#7732-18-5

TSCA 8(b)	SARA 302	SARA 313	CERCLA	RCRA 261.33	TSCA 8(d)	TSCA 12(b)	FIFRA	CWC	SARA 311/312	EPICRA	CAA-SNAP	FDA
yes	no	no	no	no	no	no	yes	no	no	no	yes	no

Not subject to ITAR and EAR regulations

US State - CAS# 7631-86-9- Arizona, California, Massachusetts, Minnesota, Oregon, Pennsylvania, Texas

California - Prop 65, Title 8 CCR, Title 22 CCR, ATHS, Occupational Exposure Limits, Ozone Depleting Compounds, Precursor Chemicals, SCAQMD, California No Significant Risk Level - *No information found*. None of the chemicals are on Prop 65 lists

Advisory Agencies/Africa/Asia-Pacific/Europe Non-EU /EU Member Countries/Latin America and Caribbean/Middle East/Government Inventory Lists

CAS# 7631-86-9

IARC	AICS	New Zealand	ENCS	Switzerland	PICCS	China	Korea	Bulgaria	Germany VwVws	Lithuania
yes	yes	yes	yes	yes	yes	no	yes	no	no	yes

Exposure Limits - *No information found*

CAS# 7631-86-9

European Union Directives

793/93/EEC	1451/2007	2007/5665/EC	1907/2006 – REACH
no	yes	yes	yes

Canada Federal/Provincial Government

CAS# 7631-86-9

CEPA	NPRI	DSL	NDSL	DWQ	WHMIS	Northwest Territories	Nunavut	Yukon
no	no	yes	no	no	no	yes	yes	yes

WHMIS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

**SECTION 16 - OTHER INFORMATION**

Revision: 06

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**ABBREVIATIONS**

EU: European Union

DOT: Department of Transportation

NIOSH: National Institute for Occupational Safety and Health

ACGIH: American Conference of Governmental Industrial Hygienists

IATA: International Air Transport Association

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

IARC: International Agency for Research on Cancer

*This MSDS is intended for review and guidance in the receipt, storage, handling, use and disposal of product purchased from Thermo Fisher Scientific, and for no other purpose. Use this product only as directed and in accordance with applicable instructions and warnings provided with the product. Please consult your institution's policies regarding use of this product. If you have obtained this MSDS other than in connection with the supply of this product from Thermo Fisher Scientific, this MSDS should be consulted for general information only, and should not be relied upon for any purpose. As with the use of all hazardous materials, you should in all instances follow the guidance of the MSDS provided or available with the specific product purchased.*

End of MSDS