# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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Revision Date 09-May-2024
Version 3

ALFAAJ67518

# Micro particle size standard, polystyrene monodisperse, 15µm, 1% (solids), aqueous suspension

# SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: Micro particle size standard, polystyrene monodisperse, 15μm, 1% (solids), aqueous

suspension

Product Description: Micro particle size standard, polystyrene monodisperse, 15µm, 1% (solids), aqueous

suspension

Cat No. : J67518

**Supplier** Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

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E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

# **SECTION 2. HAZARD IDENTIFICATION**

Physical StateAppearanceOdorLiquid dispersionWhiteOdorless

# **Emergency Overview**

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### Classification of the substance or mixture

Based on available data, the classification criteria are not met

#### **Label Elements**

None required

# **Physical and Chemical Hazards**

None identified.

# **Health Hazards**

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Will likely be mobile in the environment due to its water solubility. The product is water soluble, and may spread in water systems.

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This product does not contain any known or suspected endocrine disruptors.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Component    | CAS No     | Weight % |
|--------------|------------|----------|
| Water        | 7732-18-5  | 98.99    |
| Polystyrene  | 9003-53-6  | 1        |
| Sodium azide | 26628-22-8 | 0.001    |

# **SECTION 4. FIRST AID MEASURES**

#### **Eve Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

#### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

# Most important symptoms and effects

None reasonably foreseeable.

# Self-Protection of the First Aider

No special precautions required.

# **Notes to Physician**

Treat symptomatically.

# **SECTION 5. FIRE-FIGHTING MEASURES**

## **Suitable Extinguishing Media**

Not combustible.

# Extinguishing media which must not be used for safety reasons

No information available.

# **Specific Hazards Arising from the Chemical**

None reasonably foreseeable.

#### **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.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

# **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required.

# **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

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# Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

# **SECTION 7. HANDLING AND STORAGE**

# Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

#### Storage

Keep refrigerated.

# Specific Use(s)

Use in laboratories

# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

| Component    | China                          | Taiwan | Thailand                        | Hong Kong |
|--------------|--------------------------------|--------|---------------------------------|-----------|
| Sodium azide | Ceiling: 0.3 mg/m <sup>3</sup> | -      | Ceiling: 0.29 mg/m <sup>3</sup> | -         |
|              |                                |        | Ceiling: 0.11 ppm               |           |

| Component    | ACGIH TLV                       | OSHA PEL               | NIOSH                          | The United Kingdom         | European Union             |
|--------------|---------------------------------|------------------------|--------------------------------|----------------------------|----------------------------|
| Sodium azide | Ceiling: 0.29 mg/m <sup>3</sup> | Skin                   | Ceiling: 0.1 ppm               | Skin                       | Skin                       |
|              | Ceiling: 0.11 ppm               | (Vacated) Ceiling: 0.1 | Ceiling: 0.3 mg/m <sup>3</sup> | TWA 0.1 mg/m <sup>3</sup>  | TWA 0.1 mg/m <sup>3</sup>  |
|              |                                 | ppm                    |                                | STEL 0.3 mg/m <sup>3</sup> | STEL 0.3 mg/m <sup>3</sup> |
|              |                                 | (Vacated) Ceiling: 0.3 |                                |                            | _                          |
|              |                                 | mg/m³                  |                                |                            |                            |

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

# **Exposure Controls**

# **Engineering Measures**

None under normal use conditions. .

#### Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments        |
|----------------|-------------------|-----------------|-------------|-----------------------|
| Natural rubber | See manufacturers | -               | EN 374      | (minimum requirement) |
| Nitrile rubber | recommendations   |                 |             |                       |
| Neoprene       |                   |                 |             |                       |
| PVC            |                   |                 |             |                       |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

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Skin and body protection Long sleeved clothing

**Respiratory Protection**No protective equipment is needed under normal use conditions.

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Liquid

(Air = 1.0)

@ 20 °C

Liquid

Recommended Filter type: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance White

Physical State Liquid dispersion

**Odor** Odorless

Odor Threshold No data available

pH No information availableMelting Point/Range No data available

Softening Point/Range
No data available
No data available
No information available

Flash Point > 110 °C / > 230 °F Method - No information available

**Evaporation Rate** No data available

Flammability (solid,gas)

Not applicable

Explosion Limits

No data available

Vapor Pressure 23 hPa @ 20 °C

Vapor Density
Specific Gravity / Density
Bulk Density
No data available
1.05 g/cm3
Not applicable

Water Solubility Miscible

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

**Conditions to Avoid** 

Autoignition Temperature

Decomposition Temperature

Viscosity

No data available
No data available
No data available

Explosive Properties

Oxidizing Properties

No information available
No information available

# **SECTION 10. STABILITY AND REACTIVITY**

**Stability** Stable under normal conditions.

Hazardous ReactionsNone under normal processing.Hazardous PolymerizationNo information available.

Materials to avoid No information available.

Hazardous Decomposition Products None under normal use conditions.

None known.

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**SECTION 11. TOXICOLOGICAL INFORMATION** 

# **Product Information**

(a) acute toxicity;

Toxicology data for the components

| Component    | LD50 Oral               | LD50 Dermal | LC50 Inhalation                     |
|--------------|-------------------------|-------------|-------------------------------------|
| Water        | -                       | -           | -                                   |
| Sodium azide | LD50 = 27 mg/kg ( Rat ) | -           | LC50 0.054 - 0.52 mg/L (Rat)<br>4 h |

(b) skin corrosion/irritation; No data available

No data available (c) serious eye damage/irritation;

(d) respiratory or skin sensitization;

No data available Respiratory Skin No data available

No data available (e) germ cell mutagenicity;

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

No data available (g) reproductive toxicity;

No data available (h) STOT-single exposure;

(i) STOT-repeated exposure; No data available

**Target Organs** No information available.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and No information available

delayed

# **SECTION 12. ECOLOGICAL INFORMATION**

Contains no substances known to be hazardous to the environment or that are not **Ecotoxicity effects** 

degradable in waste water treatment plants.

| Component    | Freshwater Fish   | Water Flea | Freshwater Algae | Microtox |
|--------------|---|------------|------------------|----------|
| Sodium azide | LC50: = 0.7 mg/L, 96h<br>(Lepomis macrochirus)<br>LC50: = 0.8 mg/L, 96h<br>(Oncorhynchus mykiss)<br>LC50: = 5.46 mg/L, 96h<br>flow-through<br>(Pimephales promelas) |            |                  |          |

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**Persistence and Degradability** 

**Persistence** Miscible with water, Persistence is unlikely, based on information available.

Bioaccumulative Potential Bioaccumulation is unlikely

Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the

environment due to its water solubility Highly mobile in soils

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

# **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused

**Products** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

**Contaminated Packaging** Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

# **SECTION 14. TRANSPORT INFORMATION**

Road and Rail Transport Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

Special Precautions for User No special precautions required

# **SECTION 15. REGULATORY INFORMATION**

#### International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ISHL), Australia (AICS), Korea (KECL).

| Component    | The<br>Inventory of<br>Hazardous<br>Chemicals<br>(2015<br>Edition) |   | TCSI | IECSC | EINECS    | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL     |
|--------------|--|---|------|-------|-----------|------|-----|-------|------|------|------|----------|
| Water        | -  | - | X    | Х     | 231-791-2 | Х    | Х   | Х     | Х    |      | Χ    | KE-35400 |
| Polystyrene  | -  | - | Х    | Х     | -         | Х    | Х   | Х     | Х    | Х    | Χ    | KE-13257 |
| Sodium azide | X  | X | X    | Х     | 247-852-1 | Х    | X   | X     | X    | X    | Х    | KE-31357 |

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**National Regulations** 

#### **SECTION 16. OTHER INFORMATION**

**Prepared By** Health, Safety and Environmental Department

**Revision Date** 09-May-2024

New emergency telephone response service provider. **Revision Summary** 

#### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

#### Legend

**CAS** - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

IMO/IMDG - International Maritime Organization/International Maritime

MARPOL - International Convention for the Prevention of Pollution from

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

Dangerous Goods Code

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** 

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

ATE - Acute Toxicity Estimate

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Physical hazards On basis of test data **Health Hazards** Calculation method **Environmental hazards** Calculation method

VOC - (Volatile Organic Compound)

#### **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**