

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SARTORIUS

## PULSin®0.4mL

Version	Revision Date:	SDS Number:	Date of last issue: 15.11.2024
1.1	12.12.2024	SAG-R0003356	Date of first issue: 15.11.2024

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name : PULSin®0.4mL

Product code : 101000010

Other means of identification : PULSin®

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

Use of the Substance/Mixture : For Research Use Only.

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

Company : Sartorius UK Limited  
Longmead Business Centre  
Blenheim Road  
KT19 9QQ Epsom

Telephone : +441372737159

E-mail address of person responsible for the SDS : EHS-SDS@sartorius.com

#### 1.4 Emergency telephone number

UK/Europe/Global: +44.1865.407.333 (Sartorius 29003) United States: +1.866.928.0789 (Toll free), (Sartorius 29003) Canada: +1.800.579.7421 (Toll free), (Sartorius 29003) United States & Canada (geographic): +1.202.464.2554 (Sartorius 29003) Asia-Pacific/East & South East Asia (without China): +65.3158.1074 (Sartorius 29003) Japan: +81.3.4578.9341 (Sartorius 29003) Indonesia: 007.803.011.0293 (Toll free Indonesia), (Sartorius 29003) Malaysia: +60.3.6207.4347 (Sartorius 29003) Thailand: 001.800.120.666.751 (Toll free Thailand), (Sartorius 29003) India: 000.800.100.7479 (Toll free India) or +65.3158.1198 (Sartorius 29003) South Korea: +82.2.3479.8401 (Sartorius 29003) Australia: +61.2.8014.4558 (Sartorius 29003) New Zealand: +64.9.929.1483 (Sartorius 29003) Middle East/Africa: +44.1235.239671 (Sartorius 29003)

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## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Formulated product

#### Components

Remarks : No hazardous ingredients

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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air. If irritation or breathing problems persist,

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please contact medical personnel.

In case of skin contact	:	Wash off with plenty of water. If symptoms persist, call a physician.
In case of eye contact	:	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
If swallowed	:	Clean mouth with water and drink afterwards plenty of water. If symptoms persist, call a physician.

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

None known.

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

Treatment : Treat symptomatically.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : No information available.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : The product itself does not burn.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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### SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
Avoid formation of aerosol.

#### 6.2 Environmental precautions

Environmental precautions : Do not let product enter drains.  
Should not be released into the environment.

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

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Pick up and transfer to properly labelled containers.

#### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.  
Clean contaminated surfaces thoroughly.  
Hygiene measures : Avoid contact with skin, eyes and clothing. Keep away from food, drink and animal feeds.

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

Storage class (TRGS 510) : 10 Combustible liquids

#### 7.3 Specific end use(s)

Specific use(s) : For Research Use Only.  
Consult the technical guidelines for the use of this substance/mixture.

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

##### Personal protective equipment

Eye protection : Safety goggles  
Hand protection

Remarks : butyl-rubber Nitrile rubber Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Skin and body protection : Lab coat  
Respiratory protection : No information available.

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### SECTION 9: Physical and chemical properties

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

Physical state : liquid  
Colour : clear, colourless  
Odour : odourless  
Odour Threshold : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Upper explosion limit / Upper flammability limit : No data available

Flash point : No data available

Auto-ignition temperature : not determined

Decomposition temperature : No data available

pH : No data available

Viscosity

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Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Solubility(ies)		
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	1 g/cm <sup>3</sup>
Relative vapour density	:	No data available
Particle characteristics		
Particle size	:	Not applicable

### 9.2 Other information

Explosives	:	Not explosive
Flammability (liquids)	:	Will not burn
Metal corrosion rate	:	No data available
Evaporation rate	:	No data available
	:	No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

None known.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions	:	None known.
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### 10.4 Conditions to avoid

Conditions to avoid : Exposure to sunlight.

### 10.5 Incompatible materials

Materials to avoid : No data available

### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

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## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

##### Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

#### Skin corrosion/irritation

##### Product:

Remarks : No data available

#### Serious eye damage/eye irritation

##### Product:

Remarks : No data available

#### Respiratory or skin sensitisation

##### Product:

Remarks : No data available

#### Germ cell mutagenicity

##### Product:

Genotoxicity in vitro : Remarks: No data available

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Genotoxicity in vivo : Remarks: No data available

### Carcinogenicity

#### Product:

Remarks : This information is not available.

### Reproductive toxicity

#### Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

### STOT - single exposure

#### Product:

Remarks : No data available

### STOT - repeated exposure

#### Product:

Remarks : No data available

### Repeated dose toxicity

#### Product:

Remarks : No data available

### Aspiration toxicity

#### Product:

No data available

## 11.2 Information on other hazards

### Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at



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levels of 0.1% or higher.

### Further information

#### Product:

Remarks : The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to fish (Chronic toxicity) : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

### 12.2 Persistence and degradability

#### Product:

Biodegradability : Remarks: No data available

### 12.3 Bioaccumulative potential

#### Product:

Bioaccumulation : Remarks: No data available

### 12.4 Mobility in soil

#### Product:

Distribution among : Remarks: No data available

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environmental compartments

### 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

**Product:**

Additional ecological information : In large quantities, this product may affect the functioning of waste-water treatment plants.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : In accordance with local and national regulations.

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## SECTION 14: Transport information

### 14.1 UN number or ID number

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

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### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. Not applicable

Water hazard class (Germany) : WGK 2 obviously hazardous to water  
Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : Total dust:  
others: 0,25 %

Inorganic substances in powdered form:  
Not applicable

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Inorganic substances in gaseous form:

Not applicable

Organic Substances:

Not applicable

Carcinogenic substance:

Not applicable

Quartz fine dust PM4:

Not applicable

Formaldehyde:

Not applicable

Germ cell mutagens:

Not applicable

Substances toxic to reproduction:

Not applicable

Poorly degradable, easily enrichable and highly toxic organic substances:

Not applicable

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

## SECTION 16: Other information

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of

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Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

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.

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