

# SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.1

Prepared on : 30.03.2019

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

### 1.1 Product identifiers

**Product name** Sodium phosphate monobasic monohydrate  
**Product Number** PSR39990  
**Brand** PureSynth research chemicals  
**CAS No.** 10049-21-5

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

**Identified uses** : Laboratory Chemicals

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

**Company** PureSynth Research Chemicals GmbH  
64683 Einhausen Marie-Curie-Straße. 3, Germany

### 1.4 Emergency telephone number

**Worldwide Helpline No.:** 1800-8908-260

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

### 2.2 Label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

### 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.

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

| Common names & Synonyms | Mol. formula | CAS number |
|-------------------------|--------------|------------|
|-------------------------|--------------|------------|

|                                        |                                                           |            |
|----------------------------------------|-----------------------------------------------------------|------------|
| Sodium dihydrogen phosphatemonohydrate | $\text{H}_2\text{NaO}_4\text{P} \cdot \text{H}_2\text{O}$ | 10049-21-5 |
|----------------------------------------|-----------------------------------------------------------|------------|

No components need to be disclosed according to the applicable regulations.

## SECTION 4: First aid measures

### Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water as precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

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

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

No data available

## SECTION 5: Firefighting measures

### Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Suitable extinguishing media

### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### Special hazards arising from the substance or mixture

Oxides of phosphorus, Sodium oxides

Not combustible.

Ambient fire may liberate hazardous vapours.

### Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

### Further information

Suppress (knock down) gases/vapors/mists with a water spray jet.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### Environmental precautions

No special environmental precautions required.

### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

|                                                                     |                                                                                             |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Precautions for safe handling</b>                                | For precautions see section 2.2.                                                            |
| <b>Conditions for safe storage, including any incompatibilities</b> | Tightly closed. Dry.<br>Hygroscopic<br>Storage class (TRGS 510): 13: Non Combustible Solids |
| <b>Specific end use(s)</b>                                          | Apart from the uses mentioned in section 1.2 no other specific uses are stipulated          |

## SECTION 8: Exposure controls / Personal protection

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Control parameters</b>                | Components with workplace control parameters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Exposure controls</b>                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Appropriate engineering controls</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Personal protective equipment:</b>    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Eye / face protection</b>             | Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Skin protection</b>                   | This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves<br>Full contact<br>Material: Nitrile rubber<br>Minimum layer thickness: 0.11 mm<br>Break through time: 480 min<br>Splash contact<br>Material: Nitrile rubber<br>Minimum layer thickness: 0.11 mm<br>Break through time: 480 min |
| <b>Body Protection</b>                   | Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.                                                                                                                                                                                                                                                                                                                                   |
| <b>Respiratory protection</b>            | required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.<br>Recommended Filter type: Filter type P1<br>The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.                 |
| <b>Control of environmental exposure</b> | Do not let product enter drains.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## SECTION 9: Physical and chemical properties

|                                                       |                                         |
|-------------------------------------------------------|-----------------------------------------|
| <b>Appearance</b>                                     | Form: crystalline                       |
|                                                       | Colour: White                           |
| <b>Odour</b>                                          | No data available                       |
| <b>pH - Value</b>                                     | 4.1 – 4.5 at 50 g/l at 25 °C            |
| <b>Density</b>                                        | 2.04 g/cm <sup>3</sup>                  |
| <b>Boiling Point</b>                                  | 158°C at 760mmHg                        |
| <b>Melting Point</b>                                  | 100°C                                   |
| <b>Solubility in water</b>                            | No data available                       |
| <b>Flash point</b>                                    | No data available                       |
| <b>Vapour pressure</b>                                | No data available                       |
| <b>Auto -ignition temperature</b>                     | No data available                       |
| <b>Vapour density</b>                                 | No data available                       |
| <b>Flammability (solid, gas)</b>                      | The product is not flammable.           |
| <b>Evaporation rate</b>                               | No data available                       |
| <b>Partition coefficient: n- octanol / water</b>      | Not applicable for inorganic substances |
| <b>Viscosity</b>                                      | No data available                       |
| <b>Explosive properties</b>                           | No data available                       |
| <b>Upper / lower flammability or explosive limits</b> | No data available                       |
| <b>Oxidizing properties</b>                           | No data available                       |

**Other safety information:** No data available

## SECTION 10: Stability and reactivity

|                                           |                                                                                        |
|-------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | No data available                                                                      |
| <b>Chemical stability</b>                 | The product is chemically stable under standard ambient conditions (room temperature). |
| <b>Possibility of hazardous reactions</b> | Violent reactions possible with: Strong acids                                          |
| <b>Condition to avoid</b>                 | Hygroscopic                                                                            |
| <b>Incompatible materials</b>             | No data available                                                                      |
| <b>Hazardous decomposition products</b>   | In the event of fire: see section 5                                                    |

## SECTION 11: Toxicological information

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Acute toxicity</b>            | LD50 Oral - Rat - > 2,000 mg/kg (OECD Test Guideline 401)<br>Remarks: (in analogy to similar products)<br>The value is given in analogy to the following substances: sodium dihydrogen phosphate<br>LC50 Inhalation - Rat - male and female - 4 h - > 0.83 mg/l - dust/mist (OECD Test Guideline 403)<br>Remarks: (in analogy to similar products)<br>The value is given in analogy to the following substances: sodium dihydrogen phosphate<br>LD50 Dermal - Rabbit - > 7.940 mg/kg<br>Remarks: (anhydrous substance) |
| <b>Skin corrosion/irritation</b> | Skin - Rabbit<br>Result: No skin irritation - 4 h (OECD Test Guideline 404)                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Serious eye damage/eye irritation</b>                  | Eyes - Rabbit<br>Result: slight irritation<br>Remarks: (IUCLID)                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Respiratory or skin sensitization</b>                  | Sensitisation test: - Mouse (OECD Test Guideline 429)                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Germ cell mutagenicity</b>                             | Test Type: Mutagenicity (mammal cell test): micronucleus.<br>Test system: Human lymphocytes<br>Metabolic activation: with and without metabolic activation<br>Method: OECD Test Guideline 487<br>Result: negative                                                                                                                                                                                                                                                  |
| <b>Carcinogenicity</b>                                    | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Reproductive toxicity</b>                              | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Specific target organ toxicity - single exposure</b>   | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Specific target organ toxicity - repeated exposure</b> | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Aspiration hazard</b>                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Additional Information</b>                             | 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.<br>To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.<br>Handle in accordance with good industrial hygiene and safety practice. |

## SECTION 12: Ecological information

### Toxicity

|                                                     |                                                                                      |
|-----------------------------------------------------|--------------------------------------------------------------------------------------|
| Toxicity to fish                                    | LC0 - Leuciscus idus (Golden orfe) - ca. 2.400 mg/l - 48 h (OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | No data available                                                                    |
| Toxicity to algae                                   | No data available                                                                    |
| Toxicity to bacteria                                | No data available                                                                    |

**Persistence and degradability** No data available

**Bioaccumulative potential** No data available

**Mobility in soil** No data available

**Results of PBT and vPvB 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.

**Other adverse effects** Discharge into the environment must be avoided.  
Depending on the concentration, phosphates may contribute to the eutrophication of water supplies.

## SECTION 13: Disposal considerations

**Waste treatment methods** No data available

**Products**

**Contaminated packaging** No data available

#### SECTION 14: Transport information

|                  | UN no. | UN proper shipping name | Hazard Class(es) | Packaging group | Marine Pollutant |
|------------------|--------|-------------------------|------------------|-----------------|------------------|
| <b>ADR / RID</b> | -      | Not dangerous goods     | -                | -               | No               |
| <b>IMDG</b>      | -      | Not dangerous goods     | -                | -               | No               |
| <b>IATA</b>      | -      | Not dangerous goods     | -                | -               | No               |

#### SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

##### **Chemical safety assessment**

For this product a chemical safety assessment was not carried out.

#### SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.