

## SAFETY DATA SHEET

Updated 27 Jan 2026

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

#### 1.1. Product identifiers

Product name : **Phytase Activity Nanosensor – Light Scattering Nanoassay™**  
Product number : **PHYPHYNNP**  
Brand : **Nanoassay™ by Zymosense**  
CAS-No. : **9005-25-8 (starch), 7732-18-5 (water)**

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

Identified uses : Laboratory chemicals, assay reagent  
Uses advised against : The product is being supplied for R&D and assaying purposes only. It is the recipient's responsibility to comply with these purposes. Use for other commercial purposes may not be performed unless consent is granted in writing by Zymosense, Inc.

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

Company : Zymosense, Inc  
2501 North Loop Drive,  
Suite 1010  
Ames, IA 50010  
United States  
Telephone : +1 515-515-7299  
[support@zymosense.com](mailto:support@zymosense.com)

**Section 2: Hazards Identification**

**2.1. Classification of the substance or mixture**

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Not classified as hazardous

**Other hazards:**

Contains a proprietary polymer. Avoid release to the environment. May be harmful to aquatic life with long lasting effects.

**2.2. GHS Label elements, including precautionary statements**

Pictogram : None required  
 Signal Word : None  
 Hazard Statements : None  
 Precautionary Statements : General laboratory hygiene recommended

**2.3. Hazards not otherwise classified (HNOC) or not covered by GHS - None**

**Section 3: Composition/information on Ingredients**

**3.1. Substances**

Synonyms : Zymosense Phytase Nanosensors  
 CAS-No. : 14306-25-3, 71119-23-8, 7732-18-5

Component	CAS-No	Weight %
Phytic acid, sodium salt	14306-25-3	<=0.3
Proprietary polymer		<=0.3
MES buffer	71119-23-8	<=2
Water	7732-18-5	>=97.4

**Description of first-aid measures**

**If inhaled**

Move person to fresh air. Get medical advice if symptoms persist.

**In case of skin contact**

Remove contaminated clothing. Rinse skin with water/shower. Get medical advice if irritation develops.

**In case of eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention if irritation persists.

**If swallowed**

Rinse mouth. Do NOT induce vomiting. Give water to drink if conscious. Get medical advice if feeling unwell.

**Most important symptoms/effects**

May cause mild eye irritation. Gastrointestinal discomfort possible after ingestion.

---

## **Section 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

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

#### **Unsuitable extinguishing media**

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

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

Carbon oxides

Nitrogen oxides

Hydrogen chloride

Ambient fire may liberate hazardous vapors.

### **5.3. Advice for firefighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### **5.4. 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**

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

Avoid breathing aerosols/mists. Ensure adequate ventilation. Wear gloves and eye protection.

### **6.2. Environmental precautions**

Do not let product enter drains or waterways.

### **6.3. Methods and materials for containment and cleaning up**

Absorb with inert absorbent (e.g., paper towels, vermiculite). Collect for disposal.

Wash spill area with water.

## **Section 7: Handling and storage**

### **7.1. Precautions for safe handling**

Avoid contact with eyes and prolonged skin contact. Avoid generating aerosols. Use good laboratory practice.

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

#### **Storage conditions**

Keep container tightly closed. Store at room temperature. Protect from freezing and excessive heat.

**Section 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**8.2. Exposure controls**

No occupational exposure limits established.

**Appropriate engineering controls**

Use in a well-ventilated area. Use local exhaust if aerosols may be generated.

**Personal protective equipment**

Safety glasses with side shields, Nitrile gloves, Lab coat.

**Hygiene measures**

Wash hands after handling. Remove contaminated clothing and wash before reuse.

**Section 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

- |    |  |   |
|----|--|---|
| a) | Appearance   | Form: turbid liquid suspension<br>Color: clear to white |
| b) | Odor   | No data available                                       |
| c) | Odor Threshold                                     | No data available                                       |
| d) | pH   | 5.5   |
| e) | Melting point/<br>freezing point                   | 0 °C  |
| f) | Initial boiling point<br>and boiling range         | Approximately 100° C (water)                            |
| g) | Flash point  | No data available                                       |
| h) | Evaporation rate                                   | No data available                                       |
| i) | Flammability<br>(solid, gas)                       | No data available                                       |
| j) | Upper/lower<br>flammability or<br>explosive limits | No data available                                       |
| k) | Vapor pressure                                     | No data available                                       |
| l) | Vapor density                                      | No data available                                       |
| m) | Density  | 1.0 g/cm <sup>3</sup>                                   |
|    | Relative density                                   | No data available                                       |
| n) | Water solubility                                   | dispersible in water                                    |

- 
- o) Partition coefficient n-octanol/water No data available
  - p) Autoignition Temp No data available
  - q) Decomposition temperature No data available
  - r) Viscosity No data available
  - s) Explosive properties Not classified as explosive
  - t) Oxidizing properties none

**9.2. Other safety information**

No data available

**Section 10: Stability and reactivity**

**10.1. Reactivity**

No data available

**10.2. Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature).

**10.3. Possibility of hazardous reactions**

Violent reactions possible with:

The generally known reaction partners of water.

**10.4. Conditions to avoid**

No information available

**10.5. Incompatible materials**

Strong oxidizing agents

**10.6. Hazardous decomposition products**

In the event of fire: see section 5

---

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity**

Not expected to be toxic

**Skin corrosion/irritation**

No data available; may cause mild irritation with prolonged contact

**Serious eye damage/eye irritation**

No data available; may cause mild irritation.

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

Not listed by IARC, NTP, or OSHA.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Section 12: Ecological information**

Expected to be biodegradable.

No known adverse environmental effects.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

**Product**

Avoid release to the environment. Components may be toxic to aquatic organisms at low concentrations.

---

**Section 14: Transport information**

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**Further information**

Not classified as dangerous in the meaning of transport regulations.

**Section 15: Regulatory information**

**SARA 302 Components**

Not Applicable

**SARA 313 Components**

Not applicable

**SARA 311/312 Hazards**

Not applicable

**Massachusetts Right To Know Components**

None listed

**Section 16: Other information**

**Further information**

The information provided is believed to be correct but is not exhaustive.

Revision date: 29-Jan-2026