

Date of issue: 03.07.2026

Replaces Data Sheet of: 20.05.2026

"**" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available

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

1.1. Product identifier

Trade Name:	PDS-250 , DNA/RNA decontamination solution, ready-to-go formulation in a spray bottle, 250 mL
Article No.:	BS-040107-DK
Preparation No.:	n.av.
Registration No.:	n.av.

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

Use: Laboratory chemicals Research and Development.

1.3. Details of the supplier of the safety data sheet

1.3.1 Address of the Company:

Biosan SIA
Ratsupites iela 7 k-2, LV-1067, Riga, Latvia
Telephone: +371 67 426 137, E-Mail: info@biosan.lv

1.4. Emergency telephone number

LATVIA - State fire and rescue service: (+371) 112; (+371) 113;
The national poison information center: +371 67042468;

GERMANY - International emergency number
+49 180 2273-112. Transport Emergency phone number:
(24 h service), phone: +49 621 60-43333;

UNITED KINGDOM - National Poisons Information Service
(24 h service), phone: +44 (0) 844-892-0111 (UK only);

FRANCE - INRS FRANCE: phone: +33 (0)1 45 42 59-59.

FOR OTHER EU COUNTRIES, please consult:
<https://echa.europa.eu/support/helpdesks>

SECTION 2: *Hazards identification

2.1. Classification of the substance or mixture

2.1.1 **Classification according to Regulation (EC) No. 1272/2008 [CLP]:** The mixture is classified as not hazardous according to regulation (EC) No. 1272/2008 [CLP].

2.2. Label elements

2.2.1 **Labelling according to Regulation (EC) 1272/2008 [CLP]:** According to EC directives or the corresponding national regulations, the product does not have to be labelled.

***Hazard statements:** none

***Supplemental hazard information:** none

***Precautionary statements:** none

2.3. Other hazards

*n.av.

SECTION 3: Composition/information on ingredients

3.1. *Mixtures

Additional information: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name, classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 7664-38-2 EC No.: 231-633-2 REACH No.: 01-2119485924-24-XXXX	orthophosphoric acid Acute Tox. 4 (H302), Eye Dam. 1 (H318), Met. Corr. 1 (H290), Skin Corr. 1B (H314)   Danger Specific concentration limit (SCL) Skin Corr. 1B; H314: C ≥ 25% Eye Irrit. 2; H319: 10% ≤ C < 25% Skin Irrit. 2; H315: 10% ≤ C < 25% *Acute Toxicity Estimate ATE (oral) 1,530 mg/kg ATE (dermal) 2,740 mg/kg	0 – ≤ 2 weight-%
CAS No.: 68439-50-9	Fatty alcohol c12-c14, ethoxylated Aquatic Acute 1 (H400), Aquatic Chronic 3 (H412)  Warning M-factor (acute): 1 *Acute Toxicity Estimate ATE (oral) > 2,000 mg/kg	0 – ≤ 1 weight-%

SECTION 4: First aid measures

4.1. Description of first aid measures

4.1.1 General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing immediately. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Remove contaminated, saturated clothing.

4.1.2 Following inhalation:

Provide fresh air.

4.1.3 *In case of skin contact:

Rinse skin with water.

4.1.4 After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water.

4.1.5 Following ingestion:

Rinse mouth. Let water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

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

No known symptoms to date.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 **Suitable extinguishing media:** Dry extinguishing powder, Carbon dioxide (CO₂). Co-ordinate fire-fighting measures to the fire surroundings.

5.1.2 **Unsuitable extinguishing media:** Full water jet.

5.2. Special hazards arising from the substance or mixture

Phosphorus oxides, carbon dioxide (CO₂).

5.3. Advice for firefighters

Wear positive pressure self-contained breathing apparatus.

5.4. Additional Information:

*The product itself does not burn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Personal precautions: Remove persons to safety. Avoid breathing dust/fume/gas/mist/vapours/spray.

Protective equipment: Wear protective gloves/protective clothing and eye protection/face protection.

6.1.2 For emergency responders

Personal protection equipment: Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

6.3.1 **For containment:** Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

6.3.2 **For cleaning up:** Water (with cleaning agent)

6.4. Reference to other sections

*Safe handling, section 7. PPE, section 8. Disposal, section 13

6.5. Additional information

Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

7.1.1 *Protective measures:

Advice on safe handling: Wear personal protection equipment (refer to section 8). Do not breathe vapours and spray.

Fire preventative measures: Usual measures for fire prevention.

Advice on general occupational hygiene: When using do not eat, drink or smoke. Avoid contact with eyes and skin.

7.2. *Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Keep container tightly closed in a cool, well-ventilated place.

Hints on storage assembly: Do not store together with strong base.

Storage class (TRGS 510, Germany): 12 – non-combustible liquids that cannot be assigned to any of the above storage classes

7.3. Specific end use(s)

n.av.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 *Occupational exposure limit values

Limit value type (country of origin)	Substance name	1) Long-term occupational exposure limit value 2) Short-term occupational exposure limit value 3) Instantaneous value 4) Monitoring and observation processes 5) Remark
TRGS 900 (DE)	orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	1) 2 mg/m ³ 2) 4 mg/m ³ 5) (inhalable fraction) DFG, EU, AGS, Y
IOELV (EU)	CAS No.: 7664-38-2 EC No.: 231-633-2	1) 1 mg/m ³ 2) 2 mg/m ³

8.1.2 *Biological limit values: n.av.

8.1.3 *DNEL-/PNEC-values: n.av.

8.2. Exposure controls

8.2.1 Appropriate engineering controls: n.av.

8.2.2 Personal protection equipment



8.2.2a **Eye/face protection:** Eye glasses with side protection (EN 166).

8.2.2b **Skin protection:** Tested protective gloves must be worn (EN ISO 374). In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration. Suitable material: NBR (Nitrile rubber) (0,19 mm), Butyl caoutchouc (butyl rubber) (0,35 mm). Breakthrough time: >8 hour(s)

8.2.2c **Respiratory protection:** Usually no personal respirative protection necessary.

8.2.3 **Environmental exposure controls:** n.av.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

9.1.1 Appearance

9.1.1a Physical state liquid

9.1.1b Form: liquid

9.1.1c Colour: colourless

9.1.1d *Odour: not determined

9.1.1e *Flammability none

9.1.2 *Safety relevant basis data

9.1.2a	pH-value, undiluted:	2.1 at 20°C
9.1.2b	Melting point / Melting range (°C):	n.av.
9.1.2c	Freezing point (°C)	n.av.
9.1.2d	Initial boiling point / Boiling range (°C):	n.av.
9.1.2e	Flash point (°C, c.c.):	n.ap.
9.1.2f	Evaporation rate (°C / s)	n.av.
9.1.2g	Auto-ignition temperature	n.ap.
9.1.2h	Upper, lower flammability, explosive limits	n.av.
9.1.2i	Vapour pressure:	n.av.
9.1.2j	Vapour density:	n.av.
9.1.2k	Density (g/ml):	n.av.
9.1.2l	Bulk density:	n.ap.
9.1.2m	Solubility (in water):	completely miscible
9.1.2n	Dynamic viscosity:	n.av.
9.1.2o	Kinematic viscosity:	n.av.
9.2.	Other information	
	No data available.	

SECTION 10: *Stability and reactivity

10.1. Reactivity

The product is stable under storage at normal ambient temperatures. The product itself does not burn.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Further information on proper storage: see section 7.

10.5. Incompatible materials

Incompatible materials: Base.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. *Information on toxicological effects

Substance name	Toxicological information
Orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	LD ₅₀ oral: 1,530 mg/kg (Rat) LD ₅₀ dermal: 2,740 mg/kg (Rabbit)
Fatty alcohol c12-c14, ethoxylated CAS No.: 68439-50-9	LD ₅₀ oral: >2,000 mg/kg (Rat)

- 11.1.1 **Acute oral toxicity:** Based on available data, the classification criteria are not met.
- 11.1.2 **Acute dermal toxicity:** Based on available data, the classification criteria are not met.
- 11.1.3 **Acute inhalation toxicity:** Based on available data, the classification criteria are not met.
- 11.1.4 **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
- 11.1.5 **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.
- 11.1.6 **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.
- 11.1.7 **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- 11.1.8 **Carcinogenicity:** Based on available data, the classification criteria are not met.
- 11.1.9 **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- 11.1.10 **STOT-single exposure:** Based on available data, the classification criteria are not met.
- 11.1.11 **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- 11.1.12 **Aspiration hazard:** Based on available data, the classification criteria are not met.
- 11.1.13 **Additional information:** No data available

11.2. Information on other hazards

n.av.

SECTION 12: Ecological information

12.1. *Toxicity

Substance name	Toxicological information
Orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	EC50: >100 mg/l 3d (Algae/water plant, Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)) EC50: >100 mg/l 2d (crustaceans, Daphnia magna) NOEC: 100 mg/l 3d (Algae/water plant, Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)) NOEC: 56 mg/l 2d (crustaceans, Daphnia magna)
Fatty alcohol c12-c14, ethoxylated CAS No.: 68439-50-9	LC50: 0.423 mg/l 4d (fish, Pimephales promelas) OECD Guideline 203 (Fish, Acute Toxicity Test) EC50: 0.044 mg/l 3d (Algae/water plant, Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)) OECD Guideline 201 (Alga, Growth Inhibition Test) EC50: 0.125 mg/l 2d (crustaceans, Daphnia magna) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) NOEC: <1 mg/l (Algae/water plant) NOEC: 0.037 mg/l 3d (Algae/water plant, Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)) OECD Guideline 201 (Alga, Growth Inhibition Test) NOEC: 0.304 mg/L 4d (fish, Pimephales promelas) OECD Guideline 203 (Fish, Acute Toxicity Test) NOEC: 0.045 mg/L 2 d (crustaceans, Daphnia magna) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

12.2. Persistence and degradability

n.av.

12.3. *Bioaccumulative potential

Substance name	Log K _{ow}
Fatty alcohol c12-c14, ethoxylated CAS No.: 68439-50-9	7

12.4. Mobility in soil

n.av.

12.5. *Results of PBT and vPvB assessment

Substance name	Results of PBT and vPvB assessment
Orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Fatty alcohol c12-c14, ethoxylated CAS No.: 68439-50-9	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6. Endocrine disrupting properties

n.av.

12.7. Other adverse effects

n.av.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation.

13.2. Product/Packaging disposal

13.2.1 **Waste Code product:** 20 01 29 – Detergents containing hazardous substances. Evidence for disposal must be provided.

13.2.2 **Appropriate disposal / Product:** Consult the appropriate local waste disposal expert about waste disposal.

13.2.3 **Appropriate disposal / Package:** Completely emptied packages can be recycled.

SECTION 14: Transport information

14.1. **UN number or ID number:** No dangerous good in sense of transport regulations ADR/RID, AND, IMDG, ICAO-TI / IATA-DGR.

14.2. **UN proper shipping name:** No dangerous good in sense transport regulations ADR/RID, AND, IMDG, ICAO-TI / IATA-DGR.

14.3. Transport hazard class(es)

n.ap.

14.4. Packing group

n.ap.

14.5. Environmental hazards

n.ap.

14.6. Special precautions for user

n.ap.

14.7. *Maritime transport in bulk according to IMO

n.av.

SECTION 15: Regulatory information

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

15.1.1 EU legislation, other regulations (EU): 1907/2006 REACH, 1272/2008 CLP GHS , 98/24/EC

15.1.2 *National regulations

[DE] National regulations	
Restrictions of occupation	22 JArbSchG., 4 MuSchRiV., 5 MuSchRiV., Betriebssicherheitsverordnung (BetrSichV)
Annex Chemikalien-Verbotsverordnung (ChemVerbotsV)	Hazardous Substances Ordinance (GefStoffV), Chemikaliengesetz (ChemG)
Water hazard class	WGK: 1 - slightly hazardous to water
Berufsgenossenschaftliche Vorschriften (DGUV-Vorschriften)	Berufsgenossenschaftliche Vorschriften (DGUV-Vorschriften)

15.2. **Chemical safety assessment:**
n.av.

SECTION 16: Other information

16.1. Change indication:

S2, 2.2.1, 2.3	New section, updated information
3.1, 12.5	PBT / vPvB criteria added
3.1, 11.1, 12.1, 12.3	Acute toxicity data update
4.13	Amended info
6.4	Internal reference numbers updated
7.1.1, 7.2	Protection measures and storage info updated
8.1.1, 8.1.2, 8.1.3	Exposure limits updated
9.1	Restructured and updated
S10	Amended info
15.1.2	National regulations: Germany added

16.2. Abbreviations and acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS – Chemical Abstracts Service
CLP – Classification, Labelling and Packaging
DIN – German Institute for Standardization / German Industrial Standard
DNEL – derived no-effect level
EC₅₀ – Effective Concentration 50%
ECHA – European Chemicals Agency
EN – European Standard
ES – Exposure scenario
EWC – European Waste Catalogue
GHS – Globally Harmonized System of Classification and Labelling of Chemicals
ICAO – International Civil Aviation Organization
IMDG – International Maritime Dangerous Goods
IMO – International Maritime Organization
ISO – International Standards Organisation
LC₅₀ – Lethal (fatal) Concentration 50%
LD₅₀ – Lethal (fatal) Dose 50%

MAK – Maximum concentration in the workplace air (CH)
 NFPA – National Fire Protection Association
 NIOSH – National Institute for Occupational Safety & Health
 NOEC – No Observed Effect Concentration
 OECD – Organisation for Economic Cooperation and Development
 OSHA – Occupational Safety & Health Administration
 PBT – persistent and bioaccumulative and toxic
 PNEC – Predicted No Effect Concentration
 REACH – Registration, Evaluation and Authorization of Chemicals
 RID – Dangerous goods regulations for transport by rail
 SCL – Specific concentration limit
 TRGS – Technische Regeln für Gefahrstoffe
 UN – United Nations

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations)

16.3. Key literature references and sources for data

TRGS 510, TRGS 525, TRGS 900, Safety data sheets for the ingredients, 1907/2006 REACH, 1272/2008 CLP GHS

Substance name	Type	source of supply
orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	EC ₅₀ ; NOEC	Source: European Chemicals Agency, http://echa.europa.eu/
Fatty alcohol c12-c14, ethoxylated CAS No.: 68439-50-9	LC ₅₀ ; EC ₅₀ ; NOEC	Source: European Chemicals Agency, http://echa.europa.eu/

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

16.5. List of relevant hazard statements and/or precautionary statements

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

16.6. Training advice

No data available

16.7. Additional information

This data sheet was created in accordance with EU regulation (EC) No. 1907/2006 (REACH).

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

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