

Production date: November 21, 2020
Revision date: November 21, 2020
Trade name: BUFFER PROTECT NT™

1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifier

Trade name: BUFFER PROTECT NT™
CAS-No.: not applicable

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

Buffer to adjust the pH of a suspension.
LCS PW: Widespread use by professional workers
SU 1: Agriculture, forestry and fishing
PC 12: Fertilizers
PROC 11: Non industrial spraying

1.3 ERC 8d: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) Details of the supplier of the safety data sheet

Supplier: bio-ferm, Biotechnologische Entwicklung und Produktion GmbH
Address: Industriestraße 21
3130 Herzogenburg
Country: Austria
Information contact:
Company: bio-ferm, Biotechnologische Entwicklung und Produktion GmbH
Phone: +43 (0) 2782 833-00
Email: office@bio-ferm.com

1.4 Emergency telephone number

Call emergency hotline CHEMTREC 1-800-424-9300.

2 HAZARDS IDENTIFICATION

2.1 Classification of the mixture:

The classification complies with actual legally binding EU Directives and is supplemented by company and literature data.

2.2 Label elements

Hazard determining component for labelling:

Citric acid

KEEP OUT OF REACH OF CHILDREN

READ THE LABEL BEFORE USING

CAUTION: CAUSES SERIOUS EYE IRRITATION AND SKIN IRRITATION

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Other hazards

The substances contained in the product are not classified as PBT- or vPvB-substance.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

This product is a mixture.

3.2 Mixture

Substance name: Citric acid
CAS-No.: 77-92-9
EINECS: 201-069-1
REACH-No: 01-2119457026-42-0000
Concentration: 70-90 %

Classification acc. to Regulation (EC) No 1272/2008: Eye Irrit. 2, H319 Causes serious eye irritation.

4 FIRST-AID-MEASURES

4.1 Description of first aid measures

General advice: Take affected persons out of danger area and lay down. Upon suspicion of poisoning stop working and seek medical advice. Call local emergency information.

Inhalation: Supply fresh air; consult doctor in case of symptoms.

Skin contact: Remove contaminated clothes; wash the affected skin with plenty of water for at least 15 minutes. If skin irritation occurs, seek medical advice. Wash contaminated clothing before reuse.

Eye contact: Rinse opened eye under running water (> 15 min). Then consult a doctor. Remove contact lenses, if present and easy to do. Call a doctor immediately.

Ingestion: Rinse out mouth and then drink plenty of water. If symptoms of indisposition persist, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam. Use firefighting measures that suit the environment.

5.2 Special hazards arising from the substance or mixture

Can be released in case of fire: carbon monoxide.

5.3 Advice for fire-fighters

Protective equipment: Wear self-contained breathing apparatus.

Do not inhale explosion gases or combustion gases.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid causing dust.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water.

Small amounts may be diluted with plenty of water and washed away. Dispose of larger amounts in accordance with Local Authority requirements.

6.3 Methods and material for containment and cleaning up

Collect mechanically. Dispose of contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep containers tightly sealed.

Information about protection against explosions and fires: Prevent formation of dust. Dust can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, well-ventilated area.

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Information about storage in one common storage facility

Store away from oxidizing agents.

Further information on storage conditions

Keep container tightly sealed.

Storage class

LGK 11

7.3 Specific end uses

Buffer to adjust the pH of a suspension. Refer to the product label.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

If ventilation in working space is insufficient, an exhaustor should be installed.

8.2.2 Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to general rules for handling chemicals.

Keep away from foodstuffs, beverages and food.

Immediately take off all contaminated clothing.

Wash contaminated clothing before reuse.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

Breathing equipment

Respiratory protection necessary at: dust formation.

Fine dust filter mask, filter P2 or P3

Protection of hands

Protective gloves.

The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374.

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This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.

Only use chemical-protective gloves with CE-labelling of category III.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

Nitrile rubber, NBR

Butyl rubber, BR

Recommended thickness of the material: 0.5 mm.

Penetration time of glove material

Value for permeation: Level ³ 6 (480 min).

Eye protection

Safety glasses.

Body protection

Protective work clothing.

8.2.3 Environmental exposure control

Prevent further leakage or spillage if safe to do so.

See Section 6 and 7.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Solid
Color:	white to light grey
Odor:	odorless
pH-value at 20°C:	3-4
Melting point/range (°C):	Not applicable.
Boiling point/range (°C):	Not applicable.
Flash point (°C):	Not applicable.
Ignition temperature (°C):	Not determined.
Self-inflammability:	Not determined
Danger of explosion:	Product is not explosive.
Vapour pressure:	Not applicable.
Density at 20 °C:	0.5-1.0 g/cm ³
Relative density:	Not determined.
Vapour density:	Not applicable.

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Evaporation rate: Not applicable.
Solubility in/ Miscibility with water: Soluble.
Solids content: 100.0 %

9.2 Other safety information

No further physical-chemical data were produced.

10 STABILITY AND REACTIVITY

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Reacts with alkali (lyes).
Reacts with oxidizing agents.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

No dangerous decomposition products known.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

LD/LC50 values that are relevant for classification:

77-92-9 citric acid

Acute oral toxicity LD₅₀ > 3000 mg/kg (Rat)

Primary irritant effect:

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

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Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Additional toxicological information

This statement was deduced from the properties of the single components.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

12 ECOLOGICAL INFORMATION**12.1 12.1 Toxicity****Aquatic toxicity**

No further relevant information available

12.2 Persistence and degradability

Easily biodegradable.

12.3 Bioaccumulative potential

Does not accumulate in organisms.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

No further relevant information available.

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13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated under adherence to official regulations.

Product / Packaging disposal

Do not reuse contaminated packaging for other purposes; dispose according to official regulations. Do not dispose waste or remains together with domestic waste, do not empty into sink or toilet, hand over to hazardous waste disposers.

Uncleaned packagings

Recommendation:

Non-contaminated packagings can be used for recycling.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Recommended cleaning agent: Water, if necessary with cleaning agent.

14 TRANSPORT INFORMATION

14.1 UN-No

Void

14.2 Proper shipping name

Void

14.3 Class(es)

Void

14.4 Packing group

Void

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

The product is sold only in appropriate packaging.

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15 REGULATORY INFORMATION

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

EU regulations

The product is classified according to EC guidelines.

National regulations

The classification is made according to national registration.

15.2 Chemical Safety Assessment

The mixture was not subject to a chemical safety assessment.

16 OTHER INFORMATION

Further information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Indication of changes

Section:-