

Production date: January 1, 2020  
 Revision date: -  
 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

A buffering agent to be tank-mixed with BLOSSOM PROTECT™ (EPA Reg. No. 86174-4)

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

Supplier: bio-ferm, Biotechnologische Entwicklung und Produktion GmbH  
 Address: Industriestraße 21  
 3130 Herzogenburg  
 Country: Austria  
 Phone: +43 (0) 2782 8330 0  
 Email: office@bio-ferm.com

#### Distributor:

Company: Westbridge Agriculture Products,  
 Address: 1260 Avenida Chelsea,  
 Vista, California 92081, USA

### 1.4 Emergency telephone number

Poison Control: 1(800)222-1222

## 2 HAZARDS IDENTIFICATION

### 2.1 Classification of the mixture:

**HMIS RATINGS:** Health Hazard: 2 Fire Hazard: 0 Physical Hazard: 0

**Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Eye Irrit. 2 H319 Causes serious eye irritation.  
 Skin Irrit. 2 H315 Causes skin irritation.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

#### Hazard pictograms

Production date: January 1, 2020  
 Revision date: -  
 Trade name: BUFFER PROTECT NT™



GHS07

### Signal word

Warning

### Hazard statements

H319 Causes serious eye irritation.  
 H315 Causes skin irritation.

### Precautionary statements

P264 Wash hands thoroughly after handling.  
 P280 Wear protective gloves / eye protection / face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P337+P313 If eye irritation persists: Get medical advice / attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

This product is a mixture. The full composition of this product is a trade secret. No other ingredient is considered to be toxic or irritating.

### 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.

Production date: January 1, 2020  
Revision date: -  
Trade name: BUFFER PROTECT NT™

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## 4 FIRST-AID-MEASURES

### 4.1 Description of first aid measures

**EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.  
Call a poison control center or doctor for treatment advice.

**INGESTION:** Call local poison control center or doctor immediately for treatment advice.  
Have person sip a glass of water if able to swallow.  
Do not induce vomiting unless told to do so by a poison control center or doctor.  
Do not give anything to an unconscious person.

**SKIN:** Remove contaminated clothing.  
Rinse skin with plenty of water for 15-20 minutes.  
Call a poison control center or doctor for treatment advice.

**INHALATION:** Move person to fresh air.  
If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.  
Call a poison control center or doctor for further treatment advice.

### SUSPECTED CANCER AGENT?

NO: Federal OSHA, NTP, IARC, Cal/OSHA

### 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: CO<sub>2</sub>, 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.

Production date: January 1, 2020  
Revision date: -  
Trade name: BUFFER PROTECT NT™

### 5.3 Advice for fire-fighters

Protective equipment: Wear self-contained breathing apparatus.

Do not inhale explosion gases or combustion gases.

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## 6 ACCIDENTAL RELEASE MEASURES

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

Wear protective clothing, goggles and gloves. Ventilate area, minimize direct contact with skin and eyes, and prevent inhalation. Collect spilled material and place into a clean, covered container for disposal. Cover container loosely and prevent the formation of dust.

**Always dispose of waste materials in accordance with all State, Federal and Local Regulations.**

Production date: January 1, 2020  
Revision date: -  
Trade name: BUFFER PROTECT NT™

## 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.

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# 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.

### 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.

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# 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.

Production date: January 1, 2020  
Revision date: -  
Trade name: BUFFER PROTECT NT™

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

If ventilation in working space is insufficient, an exhauster 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.

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 <sup>3</sup> 6 (480 min).

Production date: January 1, 2020  
Revision date: -  
Trade name: BUFFER PROTECT NT™

**Eye protection**

Safety glasses.

**Body protection**

Protective work clothing.

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**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 <sup>3</sup>
Relative density:	Not determined.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in/ Miscibility with water:	Soluble.
Solids content:	100.0 %

**9.2 Other safety information**

No further safety related physical-chemical data are known.

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**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.

Production date: January 1, 2020  
Revision date: -  
Trade name: BUFFER PROTECT NT™

### 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.

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## 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** LD<sub>50</sub> > 3000 mg/kg (Rat)

Primary irritant effect:

**Skin corrosion/irritation**

Causes skin irritation.

**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.



Production date: January 1, 2020  
Revision date: -  
Trade name: BUFFER PROTECT NT™

**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.

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## 12 ECOLOGICAL INFORMATION

### 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.

Production date: January 1, 2020  
Revision date: -  
Trade name: BUFFER PROTECT NT™

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

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## 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

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

This product contains no substances which are denoted as toxic chemicals under the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR Part 372).

**CERCLA:** Not Regulated

**TSCA:** Not Regulated

**PROPOSITION 65:** This product does not contain any substance(s) which are deemed by the state of California to cause cancer, birth defects, or other reproductive effects.

This document complies with the U.S. Department of Labor's Occupational Safety and Health Administration's (OSHA) requirements.

Production date: January 1, 2020  
Revision date: -  
Trade name: BUFFER PROTECT NT™

### **EU regulations**

The product is classified according to EC guidelines.

#### **Directive 2012/18/EU**

Named dangerous substances - ANNEX I: None of the ingredients is listed.

### **15.2 Chemical Safety Assessment**

The mixture was not subject to a chemical safety assessment.

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## **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 (last version: -)**

Section: -