

# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 745120.25

Protino Ni-TED 2000 packed columns (25)

Page: 1/9

Printing date: 12.05.2021

Date of issue: 04.07.2019

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

### 1.1 Product identifier

REF 745120.25  
Product name Protino Ni-TED 2000 packed columns (25)

REACH Registration number(s): see SECTION 3.1/3.2 or  
A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

25 x 1 col. Protino® Ni-TED 2000 (500 mg)  
1 x 100 mL 4x Elution  
1 x 140 mL 8x LEW

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

#### Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0  
The exposure scenario is integrated into sections 1-16.

#### Uses advised against

not described

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

#### Manufactured by:

MACHEREY-NAGEL GmbH & Co. KG  
Valenciener Str. 11, 52355 Düren, GERMANY  
Tel.: +49 2421 969 0

E-mail: [sds@mn-net.com](mailto:sds@mn-net.com) ([msds@mn-net.com](mailto:msds@mn-net.com))

### 1.4 Emergency telephone number

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service.  
DE: Gemeinsames Giftinformationszentrum (GGIZ) 99089 Erfurt tel. +49 361 730 730

You find our current versions of SDS (22 languages) in Internet:

<http://www.mn-net.com/SDS>

## SECTION 2: Hazard identification

### 2.0 Classification of the complete product



GHS08

Signal word DANGER

**Hazard identification** **Hazard classes/categories**

H360D Repr. 1B

### 2.1 Classification of the substance or mixture

1 col. Protino® Ni-TED 2000 (500 mg)

Signal word Do not need labelling as hazardous  
-

No hazard class

100 mL 4x Elution

# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 745120.25

Protino Ni-TED 2000 packed columns (25)

Page: 2/9

Printing date: 12.05.2021

Date of issue: 04.07.2019



GHS08

Signal word

DANGER

**Hazard identification**

**Hazard classes/categories**

H360D

Repr. 1B

**140 mL 8x LEW**

Signal word

Do not need labelling as hazardous

No hazard class

## 2.2 Label elements

According **CLP directive** inner packages must be only labelled with GHS symbol(s) and product identifier(s) (EU 1272/2008 Annex I - 1.5.1.2).

**1 col. Protino® Ni-TED 2000 (500 mg)**

Do not need labelling as hazardous

Signal word: -

**100 mL 4x Elution**



GHS08

Signal word: DANGER

H360D

May damage the unborn child.

P201, P280sh, P308+313, P405

Obtain special instructions before use. Wear protective gloves/eye protection. IF exposed or concerned: Get medical advice/attention. Store locked up.

**140 mL 8x LEW**

Do not need labelling as hazardous

Signal word: -

## 2.3 Other hazards

**Possible hazards from physicochemical properties**

The property "Causes severe skin burns and eye damage." is not relevant, because the mixture "4x Elution" is buffered to pH <8.5 (see GHS Directive 1272/2008/EC Annex I, chapter 3.2.3.1.2.). ---

**Information pertaining to particular risks to human and possible symptoms**

May damage the unborn child. -

**Information pertaining to particular risks to the environment**

**PBT:** not applicable

**vPvB:** not applicable

**Other hazards**

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# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 745120.25

Protino Ni-TED 2000 packed columns (25)

Page: 3/9

Printing date: 12.05.2021

Date of issue: 04.07.2019

## SECTION 3: Composition/information on ingredients

### 3.1 Substances or 3.2 Mixtures

#### 1 col. Protino® Ni-TED 2000 (500 mg)

Chemical: *article, not under regulation of REACH or GHS (CLP)* CAS No.: -  
 Classification: No criteria for classification or naming of chemical not required.  
 Pseudonym: article emits no hazards, which must be declared  
 TSCA Inventory: not applicable  
 REACH Reg. No.: must not be registered  
 Concentration: 98 - <100 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

#### 100 mL 4x Elution

Chemical: *imidazole* CAS No.: 288-32-4  
 Classification: H302, Acute Tox. 4 oral, H314, Skin Corr. 1B, H360D, Repr. 1B  
 Formula: C<sub>3</sub>H<sub>4</sub>N<sub>2</sub>  
 TSCA Inventory: listed  
 REACH Reg. No.: 01-2119485825-24-xxxx  
 EC No.: 206-019-2  
 RTECS: NI3325000 MFCD: 00005183  
 KE No.: KE-20937  
 Concentration: 5 - <10 %  
 acc. CLP (GHS): H360D, Repr. 1B

Chemical: *monosodium phosphate* CAS No.: 7558-80-7  
 Classification: No criteria for classification or naming of chemical not required.  
 Formula: NaH<sub>2</sub>PO<sub>4</sub>  
 TSCA Inventory: listed  
 REACH Reg. No.: 01-2119489796-13-XXXX  
 EC No.: 231-449-2  
 KE No.: KE-31577  
 Concentration: 1 - <5 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

#### 140 mL 8x LEW

Chemical: *sodium chloride* CAS No.: 7647-14-5  
 Classification: No criteria for classification or naming of chemical not required.  
 Formula: NaCl  
 Pseudonym: salt  
 TSCA Inventory: listed  
 REACH Reg. No.: exempt, Annex V  
 EC No.: 231-598-3  
 RTECS: VZ4725000  
 KE No.: KE-31387  
 Concentration: 10 - <30 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Chemical: *phosphate buffer solution* CAS No.: -  
 Classification: No criteria for classification or naming of chemical not required.  
 Formula: K/Na<sub>1-3</sub> H<sub>2-0</sub> PO<sub>4</sub> · x H<sub>2</sub>O  
 TSCA Inventory: all listed  
 KE No.: listed  
 Concentration: 5 - <20 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

### 3.3 Remarks

When not listed, mixtures are added with water [CAS No. 7732-18-5] to 100%.

List of H and P phrases: see section 16.1

# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 745120.25

Protino Ni-TED 2000 packed columns (25)

Page: 4/9

Printing date: 12.05.2021

Date of issue: 04.07.2019

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice.

#### 4.1.1 After SKIN Contact

Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

#### 4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

#### 4.1.3 After INHALATION of vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. ---

#### 4.1.4 After ORAL Intake

After oral intake lots of water should be drunk after it has been ingested. ---

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

CMR Effects: May damage the unborn child. ---

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

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

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

Formation of hazardous and caustic vapour-air mixtures possible. ---

### 5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

### 5.4 Additional information

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## SECTION 6: Accidental release measures

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

Do not breathe vapours. Wear suitable protective gloves (see 8.2.2). Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.

### 6.2 Environmental precautions

not necessary

### 6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. And dispose in accordance to local regulations for the disposal of hazardous chemicals. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and flush with water into drains.

### 6.4 Reference to other sections

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

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

The original product package of MACHEREY-NAGEL allows a safe storage. Products containing also toxic substances should be kept locked up.

Storage class (VCI):

10

# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 745120.25	Protino Ni-TED 2000 packed columns (25)	Page: 5/9
Printing date: 12.05.2021	Date of issue: 04.07.2019	

Water hazard class (DE): 1

- 7.2.1 **Requirements for stock rooms and containers**  
Keep original product packages tightly closed during handling and storage, so that they are not immediately accessible to outside parties.
- 7.3 **Specific end use(s)**  
Product for analytical use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

<b>1 col. Protino® Ni-TED 2000 (500 mg)</b>	
Chemical: <i>article, not under regulation of REACH or GHS (CLP)</i>	CAS No.: -
<b>100 mL 4x Elution</b>	
Chemical: <i>imidazole</i>	CAS No.: 288-32-4
DNEL: 10.6 <sub>inh</sub> mg/m <sup>3</sup> DNEL = Derived No-Effect Level (for workers)	
PNEC <sub>(fresh water)</sub> : 0.13 mg/L PNEC = Predicted No Effect Concentration	
TRGS 900 (DE): 1.5 A /4 E mg/m <sup>3</sup> E/e respirable	
Chemical: <i>monosodium phosphate</i>	CAS No.: 7558-80-7
DNEL: 4.07 <sub>inh</sub> mg/m <sup>3</sup> DNEL = Derived No-Effect Level (for workers)	
TRGS 900 (DE): - E/e respirable	
<b>140 mL 8x LEW</b>	
Chemical: <i>sodium chloride</i>	CAS No.: 7647-14-5
Chemical: <i>phosphate buffer solution</i>	CAS No.: -

### 8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. The highest level of cleanliness must be maintained at the workplace.

- 8.2.1 **Respiratory protection**  
No additional recommendations.
- 8.2.2 **Hand protection**  
Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.
- 8.2.3 **Eye protection**  
Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.
- 8.2.4 **Skin protection**  
Recommended to avoid contamination with these hazards.
- 8.2.5 **Personal hygiene**  
Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>1 col. Protino® Ni-TED 2000 (500 mg)</b>		
Appearance: powder (solid)	Colour: colourless	Odor: odorless
<b>100 mL 4x Elution</b>		
Appearance: liquid	Colour: colourless	Odor: odorless

# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 745120.25

Protino Ni-TED 2000 packed columns (25)

Page: 6/9

Printing date: 12.05.2021

Date of issue: 04.07.2019

pH: 8-8.5  
Specific gravity: 1.008 g/cm<sup>3</sup>

### 140 mL 8x LEW

Appearance: liquid      Colour: colourless      Odor: odorless  
pH: 7-7.7  
Specific gravity: 1.14 g/cm<sup>3</sup>

## 9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

### Relevant Properties of Substance Group

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no further data available.

### 10.2 Chemical stability

No known instability.

### 10.3 Possibility of hazardous reactions

No further data available.

### 10.4 Conditions to avoid

Not necessary. ---

### 10.5 Incompatible materials

Avoid contact with strong acids or alkalines.

### 10.6 Hazardous decomposition products

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

#### 1 col. Protino® Ni-TED 2000 (500 mg)

Chemical: *article, not under regulation of REACH or GHS (CLP)*      CAS No.: -  
TSCA Inventory: not applicable

#### 100 mL 4x Elution

Chemical: *imidazole*      CAS No.: 288-32-4  
TSCA Inventory: listed  
Japan CSCL/PRTR: not listed, Japan PDSCL: not listed  
Japan ISHL: not listed  
Korea Exist.Chem.Inventory: KE-20937  
LD50<sub>orl rat</sub>: 220 mg/kg

Carcinogenic Effects: May damage the unborn child.

Chemical: *monosodium phosphate*      CAS No.: 7558-80-7  
TSCA Inventory: listed  
Korea Exist.Chem.Inventory: KE-31577  
LD50<sub>orl rat</sub>: 8290 mg/kg  
LD50<sub>drm rbt</sub>: >7940 mg/kg

#### 140 mL 8x LEW

# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 745120.25 Protino Ni-TED 2000 packed columns (25) Page: 7/9  
 Printing date: 12.05.2021 Date of issue: 04.07.2019

Chemical: *sodium chloride* CAS No.: 7647-14-5  
 TSCA Inventory: listed  
 Korea Exist.Chem.Inventory: KE-31387  
 LD50<sub>orl rat</sub>: 3000 mg/kg  
 LD50<sub>drm rbt</sub>: 10 g/kg

Chemical: *phosphate buffer solution* CAS No.: -  
 TSCA Inventory: all listed  
 Korea Exist.Chem.Inventory: listed

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

**1 col. Protino® Ni-TED 2000 (500 mg)**  
 Chemical: *article, not under regulation of REACH or GHS (CLP)* CAS No.: -

**100 mL 4x Elution**  
 Chemical: *imidazole* CAS No.: 288-32-4  
 PNEC<sub>(fresh water)</sub>: 0.13 mg/L  
 PNEC = Predicted No Effect Concentration  
 LC50<sub>leuciscus idus/96h</sub>: 100-500 mg/L  
 EC50<sub>daphnia/48h</sub>: 341.8 mg/L  
 IC50<sub>scenedesmus quadricauda/72h</sub>: IC50/72h: 130 mg/L  
 Water hazard class (DE): 1 WGK No.: 1448  
 Dispersion coefficient<sub>(octanol-water)</sub>: -0.02  
 Storage class (VCI): 10

Chemical: *monosodium phosphate* CAS No.: 7558-80-7  
 LC50<sub>leuciscus idus/96h</sub>: LC0: ~2400<sub>48h</sub> mg/L  
 Water hazard class (DE): 1 WGK No.: 0371  
 Dispersion coefficient<sub>(octanol-water)</sub>: -3.96  
 Storage class (VCI): 12-13

**140 mL 8x LEW**  
 Chemical: *sodium chloride* CAS No.: 7647-14-5  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

Chemical: *phosphate buffer solution* CAS No.: -  
 Water hazard class (DE): 1  
 Storage class (VCI): 12

### 12.2 Persistence and degradability

not necessary

### 12.3 Bioaccumulative potential

not necessary

### 12.4 Mobility in soil

not necessary

### 12.5 Results of PBT and vPvB assessment

no data available

### 12.6 Other adverse effects

no additional data available

# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 745120.25

Protino Ni-TED 2000 packed columns (25)

Page: 8/9

Printing date: 12.05.2021

Date of issue: 04.07.2019

## SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06). Close container tightly.

### 13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.  
Dispose of contents/container to regulated waste treatment.

## SECTION 14: Transport information

14.1 - 14.4: No dangerous goods according the transport regulations

### 14.5 Environmental hazards

none, contains only small quantities of hazardous substances

### 14.6 Special precautions for user

not necessary

### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

## SECTION 15: Regulatory information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013  
German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC  
TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011  
MN Leaflet/User manual, also see [www.mn-net.com](http://www.mn-net.com)  
Look for your country-specific regulations.

### 15.2 Chemical safety assessment

not necessary for these small amounts ---

## SECTION 16: Other information

### 16.1 List of H and P phrases

#### 16.1.1 List of relevant H phrases

H360D May damage the unborn child.

#### 16.1.2 List of relevant P phrases

P201 Obtain special instructions before use.  
P280sh Wear protective gloves/eye protection.  
P308+313 IF exposed or concerned: Get medical advice/attention.  
P405 Store locked up.

### 16.2 Training advice

Multiple safety training of staffs about danger and protection by using hazards in working area. Additionally training and introduction of staffs for using these products.

### 16.3 Recommended restriction on use

Only for professional user.  
Look about employee restrictions for young people (f. ex. 94/33/EC or DE § 22 JArbSchG)!  
Look about employee restrictions for pregnant women and nursing women (f.ex. 92/85/EEC or for DE §§ 11-13 MuSchG 2017)!  
An individual package of this product or test kit has a moderate hazardous potential.

### 16.4 Further information

MACHEREY-NAGEL GmbH & Co. KG provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.  
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# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 745120.25

Protino Ni-TED 2000 packed columns (25)

Page: 9/9

Printing date: 12.05.2021

Date of issue: 04.07.2019

## 16.5 Sources of key data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS  
Regulation 487/2013/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress  
Regulation 669/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress  
Regulation 1480/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress  
TRGS 900, German engineering rules governing limits in air at work, updated 03/2019  
SUVA .CH, Limits in air at work 2009, revised on 01.2009  
Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work  
TRGS 905, German engineering rules governing carcinogens and mutagens, updated 03/18  
KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

### Revisions/Updates

Reason for Revision: 2016-03 Adaptation of regulation 1221/2015/EU