

Safety Data Sheet

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

REF: 745110.50	Protino Ni-TED 1000 packed columns (50)	Page: 1/9
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

REF 745110.50
 Product name Protino Ni-TED 1000 packed columns (50)

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.

50 x 1 col. Protino® Ni-TED 1000 (250 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 (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 1000 (250 mg)

Signal word Do not need labelling as hazardous
 -

No hazard class

100 mL 4x Elution

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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 1000 (250 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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SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

1 col. Protino® Ni-TED 1000 (250 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: C₃H₄N₂
 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: NaH₂PO₄
 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/Na₁₋₃ H₂₋₀ PO₄ · x H₂O
 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

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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

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

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

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):

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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

1 col. Protino® Ni-TED 1000 (250 mg)	
Chemical: <i>article, not under regulation of REACH or GHS (CLP)</i>	CAS No.: -
100 mL 4x Elution	
Chemical: <i>imidazole</i>	CAS No.: 288-32-4
DNEL: 10.6 _{inh} mg/m ³ DNEL = Derived No-Effect Level (for workers)	
PNEC _(fresh water) : 0.13 mg/L PNEC = Predicted No Effect Concentration	
TRGS 900 (DE): 1.5 A /4 E mg/m ³ E/e respirable	
Chemical: <i>monosodium phosphate</i>	CAS No.: 7558-80-7
DNEL: 4.07 _{inh} mg/m ³ DNEL = Derived No-Effect Level (for workers)	
TRGS 900 (DE): - E/e respirable	
140 mL 8x LEW	
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

1 col. Protino® Ni-TED 1000 (250 mg)		
Appearance: powder (solid)	Colour: colourless	Odor: odorless
100 mL 4x Elution		
Appearance: liquid	Colour: colourless	Odor: odorless

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pH: 8-8.5
Specific gravity: 1.008 g/cm³

140 mL 8x LEW

Appearance: liquid Colour: colourless Odor: odorless
pH: 7-7.7
Specific gravity: 1.14 g/cm³

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

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 1000 (250 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_{orl rat}: 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_{orl rat}: 8290 mg/kg
LD50_{drm rbt}: >7940 mg/kg

140 mL 8x LEW

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Chemical: *sodium chloride* CAS No.: 7647-14-5
 TSCA Inventory: listed
 Korea Exist.Chem.Inventory: KE-31387
 LD50_{orl rat}: 3000 mg/kg
 LD50_{drm rbt}: 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 1000 (250 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_(fresh water): 0.13 mg/L
 PNEC = Predicted No Effect Concentration
 LC50_{leuciscus idus/96h}: 100-500 mg/L
 EC50_{daphnia/48h}: 341.8 mg/L
 IC50_{scenedesmus quadricauda/72h}: IC50/72h: 130 mg/L
 Water hazard class (DE): 1 WGK No.: 1448
 Dispersion coefficient_(octanol-water): -0.02
 Storage class (VCI): 10

Chemical: *monosodium phosphate* CAS No.: 7558-80-7
 LC50_{leuciscus idus/96h}: LC0: ~2400_{48h} mg/L
 Water hazard class (DE): 1 WGK No.: 0371
 Dispersion coefficient_(octanol-water): -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

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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
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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16.5 Sources of key data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS

Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress

Regulation 669/2018/EU, 4th adaptation of CLP regulation to technical and scientific progress

Regulation 1480/2018/EU, 4th 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