

Safety Data Sheet

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

REF: 745400.25
Printing date: 15.11.2021

Protino Ni-NTA Agarose (25 mL)
Date of issue: 30.07.2018

Page: 1/8

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

1.1 Product identifier

REF 745400.25
Product name Protino Ni-NTA Agarose (25 mL)
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.

1 x 50 mL Protino® Ni-NTA Agarose (Suspension)

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
Valenciennr 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

2.1 Classification of the substance or mixture

50 mL Protino® Ni-NTA Agarose (Suspension)



GHS02 GHS07

Signal word

WARNING

Hazard identification

Hazard classes/categories

H226
H317

Flam. Liq. 3
Skin Sens. 1

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).

Harmful chemicals/mixtures with signal word: **WARNING** and highly flammable chemicals/mixtures must not be labelled with H and P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2). This labelling exemption is NOT valid for sensibilizing substances.

50 mL Protino® Ni-NTA Agarose (Suspension)



GHS02 GHS07

www.mn-net.com

Safety Data Sheet

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

REF: 745400.25

Protino Ni-NTA Agarose (25 mL)

Page: 2/8

Printing date: 15.11.2021

Date of issue: 30.07.2018

Signal word: WARNING

H317

May cause an allergic skin reaction.

P261sh, P280sh

Avoid breathing dust/vapours. Wear protective gloves/eye protection.

2.3 Other hazards

Possible hazards from physicochemical properties

Flammable properties. ---

Information pertaining to particular risks to human and possible symptoms

Cause after skin contact, impairments of health when ingested in small quantities. May cause sensitization by skin contact, also in repeated contact of small amounts. -

Information pertaining to particular risks to the environment

PBT: not applicable

vPvB: not applicable

Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

50 mL Protino® Ni-NTA Agarose (Suspension)

Chemical: *ethanol* (diluted < 20 %)
(denatured with 1%IPA/1%MEK, acc.2016/1867/EU)

CAS No.: 64-17-5d

Classification: H225, Flam. Liq. 2

Formula: C₂ H₆ O; C₂ H₅ OH

Pseudonym: ethyl alcohol, methylated spirit

TSCA Inventory: listed

REACH Reg. No.: 01-2119457610-43-xxxx

EC No.: 200-578-6

RTECS: KQ6300000

KE No.: KE-13217

Concentration: 5 - <20 %

acc. CLP (GHS): H226, Flam. Liq. 3

Indice No.:

603-002-00-5

MFCD:

00003568

Chemical: *agarose*

CAS No.: 9012-36-6

Classification: No criteria for classification or naming of chemical not required.

TSCA Inventory: listed

EC No.: 232-731-8

KE No.: KE-00278

Concentration: 1 - <10 %

acc. CLP (GHS): The criteria for classification are not fulfilled.

MFCD:

00081294

Chemical: *resin suspension with Ni in nickel(II) complexes*

CAS No.: -

Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H317, Skin Sens. 1, H332, Acute Tox. 4 inh., H334, Resp. Sens. 1, H341, Muta. 2, H350i, Carc. 1A, H360, Repr. 1B, H372, STOT RE 1, H410, Aquatic Chronic 1

Formula: Ni-complex-

TSCA Inventory: listed (NiSO₄ CAS 7786-81-4)

REACH Reg. No.: NiSO₄ : 01-2119439361-44-xxxx

EC No.: 232-104-9 (NiSO₄)

RTECS: QR9600000 (NiSO₄)

Concentration: 0.038 - <0.38 %

acc. CLP (GHS): H317, Skin Sens. 1

Indice No.:

028-009-00-5 (NiSO₄)

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: 745400.25

Protino Ni-NTA Agarose (25 mL)

Page: 3/8

Printing date: 15.11.2021

Date of issue: 30.07.2018

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 immediately. Rinse the affected skin or mucous membrane thoroughly for min. 15 minutes under running water. (If possible) use soap. Avoid neutralisation. Then apply a loose bandage.

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

May cause sensitization by skin contact, also in repeated contact of small amounts. ---

4.3 Indication of any immediate medical attention and special treatment needed

After SKIN CONTACT rinse with water for a long time. Apply glucocorticosteroides following inflammatory reactions. Inform patient respectively further measures and the possibility of long-term damages. ---

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

WARNING: Flammable (GHS regulation). May form explosive vapour-air mixtures. 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. Spray any vapours released with water. Retent fire water. Use only acid-resistant safety equipment.

For great amount - if necessary - protective breathing apparatus which is independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of a large-scale formation of toxic substances.

5.4 Additional information

Danger for environment **only in the event of a large-scale leakage** or formation of hazardous substances. ---

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). Wear eye protection. 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

see information in section 5.4 ---

Safety Data Sheet

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

REF: 745400.25

Protino Ni-NTA Agarose (25 mL)

Page: 4/8

Printing date: 15.11.2021

Date of issue: 30.07.2018

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.

Storage class (VCI): 3

Water hazard class (DE): 2

7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

7.3 Specific end use(s)

Product for analytical use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

50 mL Protino® Ni-NTA Agarose (Suspension)

Chemical: *ethanol*

CAS No.: 64-17-5d

DNEL: [derm] 343 mg/kg; [inh] 950 mg/m³

DNEL = Derived No-Effect Level (for workers)

PNEC_(fresh water): 0.96 mg/L

PNEC = Predicted No Effect Concentration

TRGS 900 (DE): 200 ppm / 380 mg/m³
E/e respirable

Short-term exposure factor: 4 (II), Y
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 500 ppm / 960 mg/m³

NIOSH: [TWA] 1000 ppm / 1900 mg/m³

[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: 1000 ppm / 1900 mg/m³

Chemical: *agarose*

CAS No.: 9012-36-6

Chemical: *resin suspension with Ni in nickel(II) complexes*

CAS No.: -

TRGS 900 (DE): - (0,05 eNiSO₄ alt) mg/m³
E/e respirable

Short-term exposure factor: (4)
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 0,05 eNiSO₄ mg/m³

SUVA(CH) BAT value: U/c,b 45 µg/L

NIOSH: Ca TWA 0.015Ni mg/m³

[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: TWA 1 mg/m³

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.

Safety Data Sheet

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

REF: 745400.25

Protino Ni-NTA Agarose (25 mL)

Page: 5/8

Printing date: 15.11.2021

Date of issue: 30.07.2018

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

50 mL Protino® Ni-NTA Agarose (Suspension)

Appearance: liquid

Colour: slightly green

Odor: alcoholic

Flash point:

41 °C

Particle size:

45-165 µm

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.

50 mL Protino® Ni-NTA Agarose (Suspension)

Chemical: *ethanol*

CAS No.: 64-17-5d

TSCA Inventory: listed

California Proposition 65 List: not listed

ACGIH: 1000 ppm

Exposure Routes: inhalation, ingestion, skin and/or eye contact

Target Organs: Eyes, skin, respiratory system, central nervous system, liver, blood, reproductive system

Symptoms: irritation eyes, skin, nose; headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough;

liver damage; anemia; reproductive, teratogenic

Australia NICNAS: not listed

Canada CEPA 1999: DSL yes

Japan CSCL/PRTR: not listed, Japan PDSCL: not listed

Japan ISHL: listed ≥0,1%/≥0,1%, Article 57-2 (SDS required)

South Korea TCCA: not listed

Korea Exist.Chem.Inventory: KE-13217

LD50_{oral} rat: 6200 mg/kg

LC₅₀_{inhal} gpg: 21.9 g/m³

LC₅₀_{inhal} mouse: 1400 mg/kg

LC50_{inhal} rat: [4h] 39 g/m³

LC50_{inhal} rat: [10h] 20 g/m³

LD50_{derm} rbt: 20 000 mg/kg

LD50_{oral} mouse: 3450 mg/kg

TRGS 905 (DE): K5, M5, R_F C

Chemical: *agarose*

CAS No.: 9012-36-6

TSCA Inventory: listed

Korea Exist.Chem.Inventory: KE-00278

Safety Data Sheet

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

REF: 745400.25

Protino Ni-NTA Agarose (25 mL)

Page: 6/8

Printing date: 15.11.2021

Date of issue: 30.07.2018

Chemical:	resin suspension with Ni in nickel(II) complexes	CAS No.: -
TSCA Inventory:	listed (NiSO ₄ CAS 7786-81-4)	
Exposure Routes:	inhalation, ingestion, skin and/or eye contact	
Target Organs:	Nasal cavities, lungs, skin; [lung and nasal cancer]	
Symptoms:	sensitization dermatitis, allergic asthma, pneumonitis; [potential occupational carcinogen]	
Japan CSCL/PRTR:	PRTR: ≥0,1% specific class I, Japan PDSCCL: not listed	
Japan ISHL:	listed ≥0,1%/≥0,1%,	
LD50 _{orl rat} :	264NiSO ₄ mg/kg	
Acute Effects:	Cause after skin contact, impairments of health when ingested in small quantities. May cause sensitization by skin contact, also in repeated contact of small amounts.	
EU carcinogen:	carc. 1A, mut. 2, repr. 1B	
TRGS 905 (DE):	K1	
TRGS 907 (DE):	Sah	

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

50 mL Protino® Ni-NTA Agarose (Suspension)

Chemical:	ethanol	CAS No.: 64-17-5d
PNEC (fresh water):	0.96 mg/L	
PNEC = Predicted No Effect Concentration		
LC50 _{daphnia magna/48h} :	>100 g/L	
LC50 _{pimephales promelas/96h} :	13.4-15.1 g/L	
LC50 _{leuciscus idus/96h} :	[48h] 8.14 g/L	
LC50 _{fish/96h} :	13 g/L	
EC50 _{daphnia/48h} :	9.3-14.2 g/L	
IC50 _{scenedesmus quadricauda/72h} :	[7d] 5000 mg/L	
EC10 _{pseudomonas putida/16h} :	[EC5] 6500 mg/L	
Water hazard class (DE):	1	WGK No.: 0096
Dispersion coefficient (octanol-water):	-0.31	
Storage class (VCI):	3	

Chemical:	agarose	CAS No.: 9012-36-6
Water hazard class (DE):	nwg	
Storage class (VCI):	13	

Chemical:	resin suspension with Ni in nickel(II) complexes	CAS No.: -
Water hazard class (DE):	2	
Storage class (VCI):	6.1D	

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

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).

13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.

Safety Data Sheet

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

REF: 745400.25

Protino Ni-NTA Agarose (25 mL)

Page: 7/8

Printing date: 15.11.2021

Date of issue: 30.07.2018

SECTION 14: Transport information

14.1 - 14.4: No dangerous goods according the transport regulations (Ethanol: ADR SI144/ IATA A58)

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

H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.

16.1.2 List of relevant P phrases

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261sh Avoid breathing dust/vapours.
P280sh Wear protective gloves/eye protection.

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.

MACHEREY-NAGEL GmbH & Co. KG makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly MACHEREY-NAGEL GmbH & Co. KG will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

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

Regulation 849/2021/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

TRGS 907, German engineering rules governing listing of substances and causes of sensitizations, updated November 2011

KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

www.mn-net.com

Safety Data Sheet

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

REF: 745400.25

Protino Ni-NTA Agarose (25 mL)

Page: 8/8

Printing date: 15.11.2021

Date of issue: 30.07.2018

Revisions/Updates

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