

Safety Data Sheet

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

REF: 745515.1

Protino GST/4B Column 5 mL (1)

Page: 1/7

Printing date: 15.11.2021

Date of issue: 30.07.2018

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

1.1 Product identifier

REF

745515.1

Product name

Protino GST/4B Column 5 mL (1)

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 5 mL Protino® GST/4B Column

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

Valencienn 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

5 mL Protino® GST/4B Column



GHS02

Signal word

WARNING

Hazard identification

Hazard classes/categories

H226

Flam. Liq. 3

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).

5 mL Protino® GST/4B Column



GHS02

www.mn-net.com

Safety Data Sheet

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

REF: 745515.1

Protino GST/4B Column 5 mL (1)

Page: 2/7

Printing date: 15.11.2021

Date of issue: 30.07.2018

Signal word: WARNING

2.3 Other hazards

Possible hazards from physicochemical properties

Flammable properties. ---

Information pertaining to particular risks to human and possible symptoms

Information pertaining to particular risks to the environment

Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

5 mL Protino® GST/4B Column

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: *L-glutathione*

CAS No.: 70-18-8

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

Formula: C₁₀ H₁₇ N₃ O₆ S

Pseudonym: GSH, γ-L-glutamyl-L-cysteinylglycine

TSCA Inventory: listed

EC No.: 200-725-4

RTECS: MC0556000

KE No.: KE-17781

Concentration: < 0.10 %

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

MFCD:

00065939

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

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

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.

Safety Data Sheet

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

REF: 745515.1

Protino GST/4B Column 5 mL (1)

Page: 3/7

Printing date: 15.11.2021

Date of issue: 30.07.2018

- 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**

- 4.3 Indication of any immediate medical attention and special treatment needed**
No additionally recommendations. ---

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.
- 5.4 Additional information**

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**
Do not breathe vapours. Regular staff training is necessary.
- 6.2 Environmental precautions**
not necessary
- 6.3 Methods and material for containment and cleaning up**
Bind any escaping liquid with inert absorbent.
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.
Storage class (VCI): 3
Water hazard class (DE): 1
- 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.

Safety Data Sheet

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

REF: 745515.1

Protino GST/4B Column 5 mL (1)

Page: 4/7

Printing date: 15.11.2021

Date of issue: 30.07.2018

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

5 mL Protino® GST/4B Column

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: *L-glutathione*

CAS No.: 70-18-8

Chemical: *agarose*

CAS No.: 9012-36-6

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

Not necessary.

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

5 mL Protino® GST/4B Column

Appearance: viscose

Colour: slightly grey

Odor: odorless

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

Safety Data Sheet

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

REF: 745515.1

Protino GST/4B Column 5 mL (1)

Page: 5/7

Printing date: 15.11.2021

Date of issue: 30.07.2018

No further data available.

10.4 Conditions to avoid

10.5 Incompatible materials

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.

5 mL Protino® GST/4B Column

Chemical:	<i>ethanol</i>	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 $\geq 0,1\%/\geq 0,1\%$, Article 57-2 (SDS required)	
South Korea TCCA:	not listed	
Korea Exist.Chem.Inventory:	KE-13217	
LD50 _{oral} rat :	6200 mg/kg	
LC _{Low} ihl gpg :	21.9 g/m ³	
LC _{Low} ihl hmn :	1400 mg/kg	
LC50 _{ihl} mouse :	[4h] 39 g/m ³	
LC50 _{ihl} rat :	[10h] 20 g/m ³	
LD50 _{drn} rbt :	20 000 mg/kg	
LD50 _{oral} mouse :	3450 mg/kg	
TRGS 905 (DE):	K5, M5, R _F -C	

Chemical:	<i>L-glutathione</i>	CAS No.: 70-18-8
TSCA Inventory:	listed	
Korea Exist.Chem.Inventory:	KE-17781	

Chemical:	<i>agarose</i>	CAS No.: 9012-36-6
TSCA Inventory:	listed	
Korea Exist.Chem.Inventory:	KE-00278	

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

5 mL Protino® GST/4B Column

Chemical:	<i>ethanol</i>	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	

www.mn-net.com

Safety Data Sheet

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

REF: 745515.1

Protino GST/4B Column 5 mL (1)

Page: 6/7

Printing date: 15.11.2021

Date of issue: 30.07.2018

Storage class (VCI): 3

Chemical: *L-glutathione*

CAS No.: 70-18-8

Water hazard class (DE): 1

Storage class (VCI): 13

Chemical: *agarose*

CAS No.: 9012-36-6

Water hazard class (DE): nwg

Storage class (VCI): 13

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.

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 ---

Safety Data Sheet

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

REF: 745515.1

Protino GST/4B Column 5 mL (1)

Page: 7/7

Printing date: 15.11.2021

Date of issue: 30.07.2018

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.

16.1.2 List of relevant P phrases

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

16.2 Training advice

Regular safety training.

16.3 Recommended restriction on use

Only for professional user.

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

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

Revisions/Updates

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