

Safety Data Sheet

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

Chromab. columns NAN, 3mL,400/1400/400mg Page: 1/10 Printing date: 13.01.2023 Date of issue: 18.07.2022 Version: 2.2.2.2

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

1.1 **Product identifier**

> REF 730109

Product name Chromab. columns NAN, 3mL,400/1400/400mg

see SECTION 3.1/3.2 or REACH Registration number(s):

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 400/1400/400 mg Chromabond® NAN, PP UFI: XVSV-U3M1-N20A-63PP

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 Valencienner Str. 11, 52355 Düren, Germany

Phone: +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 mbH + Co KG
DE: Gemeinsames Giftinformationszentrum (GGIZ)
99089 Erfurt tel. +49 361 730 730. https://www.co.ze. Schoemperlenstr. 3-5 <a href="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.mn-net.com/sps="http://www.m

You find our current versions of SDS in Internet:

sicherheit@cartroth.de

SECTION 2: Hazard identification

2.0 Classification of the complete product according to Regulation (EC) 1272/2008





GHS05

GHS09

Signal word **DANGER**

Hazard identification Hazard classes/categories

H290 Met. Corr. 1 H314 Skin Corr. 1B H411 Aquatic Chronic 2

2.1 Classification of the substance or mixture according to Regulation (EC) 1272/2008

400/1400/400 mg Chromabond® NAN, PP





MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com

FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com US Tel.: +1 888 321 62 24 sales-us@mn-net.com



Safety Data Sheet

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

 REF: 730109
 Chromab. columns NAN, 3mL,400/1400/400mg
 Page: 2/10

 Printing date: 13.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

Signal word DANGER

Hazard identificationHazard classes/categoriesH290Met. Corr. 1H314Skin Corr. 1BH411Aquatic Chronic 2

List of H phrases: see section 16.2

2.2 Label elements according regulation (EC) 1272/2008

Harmful chemicals/mixtures with signal word: **WARNING** must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2). Metal corrosive solutions **do not have to** be labelled with GHS symbol, signal word, H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2.1.3).

400/1400/400 mg Chromabond® NAN, PP





GHS05

GHS09

Signal word: DANGER

H314

Causes severe skin burns and eye damage.

P260sh, P280sh, P303+361+353, P305+351+338, P310

Do not breathe dust/vapours. Wear protective gloves/eye protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Label elements of the complete product





GHS05

GHS09

Signal word: DANGER

H314

Causes severe skin burns and eye damage.

P260sh, P280sh, P303+361+353, P305+351+338, P310

Do not breathe dust/vapours. Wear protective gloves/eye protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

2.3 Other hazards

Possible hazards from physicochemical properties

Generally in the case of pH values are less than 2 or higher than 11.5 then it is corrosive.

Information pertaining to particular risks to human and possible symptoms

Causes varying degrees of acid burns on the skin, to the eyes and to the mucous membranes and wounds which do not heal quickly depending on the concentration, temperature and the exposure time. Vapours especially which steam from hot liquids and mist can have a severe irritant effect upon the eyes and the respiratory organs.

Information pertaining to particular risks to the environment

Avoid contact of substance/mixture to environment. **PBT:** not applicable

vPvB: not applicable
Possible endocrine disrupting effects

no deta evollable

no data available

Other hazards

It is not possible to declare fine dust (< 12 µm) as dangerous or not. We recommend not to inhale product dust. Dust may cause damage of the inhalatory system if inhaled over a longer period.



Software: M2 V 6.0.28.156

MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com

CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com
FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com

US Tel.: +1 888 321 62 24 sales-us@mn-net.com



Safety Data Sheet

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

 REF: 730109
 Chromab. columns NAN, 3mL,400/1400/400mg
 Page: 3/10

 Printing date: 13.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

SECTION 3: Composition / information on ingredients

3.1 Substances or 3.2 Mixtures

400/1400/400 mg Chromabond® NAN, PP

Substance name: silver nitrate CAS No.: silver nitrate

Substance rating: H272, Ox. Liq. 2, H290, Met. Corr. 1, H314, Skin Corr. 1B, H318, Eye Dam. 1, H400, Aquatic Acute

H290, Met. Corr. 1, H314, Skin Corr. 1B, H318, Eye Dam. 1, H411, Aquatic Chronic 2

1, H410, Aquatic Chronic 1 Formula: AgNO 3

acc. CLP (GHS):

REACH Reg. No.: 01-2119513705-43-xxxx

EC No.: 231-853-9 Indice No.: 047-001-00-2 Concentration: 5 - <20 % Correlation factor: x = 0.635 = 40 (according to CLP regulation 2008/1272/EG Annex VI, 1.1.3.2 Note 1)

Substance name: silica CAS No.: 7631-86-9

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

Formula: SiO 2

Pseudonym (de): Silicagel, Siliziumdioxyd REACH Reg. No.: 01-2119379499-16-0166

EC No.: 231-545-4 Concentration: 80 - <95 %

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 16.2.

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. Remove contaminated clothing. Show product package, packing insert and this material safety data sheet to the doctor.

4.1.1 After SKIN Contact

Remove dust with wetted tissue. Remove contaminated clothing immediately. Rinse the affected skin or mucous membrane thoroughly for min. 15 minutes under running water. Avoid neutralisation. Then apply a loose bandage.

4.1.2 After EYE Contact

Rub dust with teardrops from eyes or: After contact with the eyes rinse thoroughly under running water with the eyelid wide open for min. 10 minutes with eye washing bottle, eye douche or running water (protect intact eye). Before (if possible) apply eye drops Proxymetacaine 0.5%, if the opening the eyelid convulsion is painful. Further treatment to be carried out by an eye specialist.

4.1.3 After INHALATION of vapours

If vomiting and if insensible place patient in recovery position and keep airways free. After inhalation of dust fresh air should be inhaled. ---

4.1.4 After ORAL Intake

After oral intake lots of water with activated charcoal supplement should be drunk after it has been ingested. Do not induce vomiting under any circumstances. Do not make any efforts to neutralise it. Contact medical advice for possible consequences.

4.2 Most important symptoms and effects, both acute and delayed

Rapid penetration and destruction of the skin. Especially in the heated form. Causes severe skin burns and eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

CORROSIVE DAMAGE: After SKIN CONTACT rinse with water for a long time. Efforts to neutralise the substance can frequently make matters worse. Apply glucocorticosteroides following inflammatory reactions. After EYE CONTACT rinse immediately with plenty of water for a long time. Eyelid convulsion measures. Name the corrosive chemical. Further treatment must to be carried out by an eye specialist. After INTAKE administer aluminium oxide drug suspensions. Administer a prophylaxis to counter pulmonary oedema following the INGESTION of corrosive aerosols. In the event of RESPIRATORY DISTREES ensure that the patient inhales oxygen. ---



MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany www.mn-net.com DE Tel.: +49 24 21 969-0 info@mn-net.com
CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com

FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com
US Tel.: +1 888 321 62 24 sales-us@mn-net.com



Safety Data Sheet

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

 REF: 730109
 Chromab. columns NAN, 3mL,400/1400/400mg
 Page: 4/10

 Printing date: 13.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

SECTION 5: Firefighting measures

5.1 Extinguishing media

5.1.1 Suitable 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.

5.1.2 Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

5.3 Advice for firefighters

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

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

Avoid dusting. Do not breathe dust. Wear suitable protective gloves (see 8.2.2). Wear eye protection, respectively face 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

Avoid contact of substance/mixture to environment. **PBT:**not applicable **vPvB:**not applicable

6.3 Methods and material for containment and cleaning up

Remove remaining dust with a vacuum cleaner. If there is no vacuum cleaner, wet dust well and remove mechanical (Inhalation protection). And dispose in accordance to local regulations for the disposal of hazardous chemicals. Clean any contaminated equipment and floors with plenty of water.

6.4 Reference to other sections

see information in section 5.4,7,8 and 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid dusting.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage is guaranteed in the original packaging . Storage class (German chemical industry): see chapter 12.1

Storage class (VCI): 5.1B Water hazard class (DE): 3

7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage. Use inbreakable container for transport of glass bottles.

7.3 Specific end use(s)

Product for analytical use.

SECTION 8: Exposure controls /personal protection

8.1 Control parameters

400/1400/400 mg Chromabond® NAN, PP

Chemical: silver nitrate

EU value: 0.01 $_{Ag}$ e mg/m³ TRGS 900 (DE): 0.01 $_{Ag}$ E mg/m³ E/e respirable

Short-term exposure factor: 2 (I)



MACHEREY-NAGEL GmbH & Co. KG

Valencienner Str. 11 52355 Düren · Germany www.mn-net.com DE Tel.: +49 24 21 969-0 info@mn-net.com
CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com
FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com

US Tel.: +1 888 321 62 24 sales-us@mn-net.com

CAS No.: 7761-88-8

CHEREY-NAGEI



Safety Data Sheet

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

REF: 730109 Chromab. columns NAN, 3mL,400/1400/400mg Page: 5/10 Printing date: 13.01.2023 Date of issue: 18.07.2022 Version: 2.2.2.2

skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 0,01 e mg/m³ NIOSH: TWA 0.01 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 0.01 mg/m³

CAS No.: 7631-86-9 Chemical:

DNEL: [inh] 4 mg/m³ DNEL = Derived No-Effect Level (for workers)

PNEC (fresh water): PNEC = Predicted No Effected Concentration 1.25 A / 4 E mg/m³ TRGS 900 (DE): E/e respirable

Short-term exposure factor: Y

skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 4 e mg/m³

NIOSH:

: Occupational Carcinogen List yes; [TWA] 6 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] 20 mppcf / 80 mg/m³

8.2 **Exposure controls**

The highest level of cleanliness must be maintained at the workplace.

8.2.1 Respiratory protection

Use for regularly working with dry powders a dust mask or a dust protection filter, class P3. No additional recommendations.

8.2.2 Skin protection / Hand protection

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

8.2.3 **Eve / Face Protection**

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection or face protection.

8.2.4

Recommended to avoid clothing damage, and to avoid contamination with these hazards.

8.2.5

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.

Thermal hazards 8.2.6

no data available

8.3 Limitation and monitoring of environmental exposure

Do not release product into environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

400/1400/400 mg Chromabond® NAN, PP

a) State of aggregation: b) Colour: colourless c) Odor: odorless d) Melting point: no data available e) Boiling point: no data available f) Flammability: no data available g) Explosive limits (lower / upper): no data available h) Flash point: no data available i) Flashing temperature: no data available j) Decomposition temperature: no data available k) pH value: no data available I) Kinematic viscosity: no data available m) Solubility in water: no data available n) Dispersion coefficient (o/w): no data available o) Vapour pressure (20°C): no data available p) Specific gravity: no data available g) Relative vapour density (air=1): no data available r) Particle size: no data available



MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com

FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com US Tel.: +1 888 321 62 24 sales-us@mn-net.com



Safety Data Sheet

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

 REF: 730109
 Chromab. columns NAN, 3mL,400/1400/400mg
 Page: 6/10

 Printing date: 13.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

9.2 Other information

Properties relevant to substance groups

Substances are highly corrosive.

SECTION 10: Stability and reactivity

10.1 Reactivity

Strong CORROSIVE, no further data available.

10.2 Chemical stability

no known instability.

10.3 Possibility of hazardous reactions

Can react violently with organic material. No further data available.

10.4 Conditions to avoid

No more required.

10.5 Incompatible materials

no additional data available

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 the hazard classes according regulation (EC) 1272/2008

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

400/1400/400 mg Chromabond® NAN, PP

Chemical: silver nitrate CAS No.: 7761-88-8

TSCA Inventory: listed

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

Target Organs: Nasal septum, skin, eyes

Symptoms: Blue-gray eyes, nasal septum, throat, skin; irritation, ulceration skin; gastrointestinal disturbance

Japan CSCL/PRTR: PRTR: ≥1,0%Ag class I, Japan PDSCL: Deleterious substance

Japan ISHL: listed ≥1,0%/≥0,1%

Korea Exist.Chem.Inventory: KE-31281, >25% Toxic 97-1-92

LD50 _{orl rat}: 1173 mg/kg

TRGS 905 (DE): R _F D

Chemical: silica CAS No.: 7631-86-9

TSCA Inventory: listed California Proposition 65 List: not listed

Exposure Routes: inhalation, skin and/or eye contact Target Organs: Eyes, respiratory system symptoms: irritation eyes, pneumoconiosis

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-31032
LD50 orl rat: 5000 mg/kg
LC50 ihl rat: 2,19-5,01 mg/L/4H

TRGS 905 (DE): R F C



Software: M2 V 6.0.28.156

MACHEREY-NAGEL GmbH & Co. KG

Valencienner Str. 11 52355 Düren · Germany www.mn-net.com DE Tel.: +49 24 21 969-0 info@mn-net.com

CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com

US Tel.: +1 888 321 62 24 sales-us@mn-net.com



Safety Data Sheet

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

 REF: 730109
 Chromab. columns NAN, 3mL,400/1400/400mg
 Page: 7/10

 Printing date: 13.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

11.2 Other hazards

Possible endocrine disrupting effects

no data available

Other information

no additional data available

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

400/1400/400 mg Chromabond® NAN, PP

Chemical: silver nitrate CAS No.: 7761-88-8

Water hazard class (DE): 3 WGK No.: 0185

Storage class (VCI): 5.1 B

Chemical: silica CAS No.: 7631-86-9

PNEC (fresh water):
PNEC = Predicted No Effected Concentration

PNEC = Predicted No Effected Concentration

 LC50 fish/96h:
 [4d] 1033-1289 mg/L

 EC50 daphnia/48h:
 512; [4d] 2600 mg/L

 EC50 chlorella vulgaris/5d:
 [4d] 218 mg/L

 Water hazard class (DE):
 nwg WGK No.: 0849

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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

12.6 Endocrine disrupting properties

no data available

12.7 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

SECTION 14: Transport information

14.1. UN number: 3316

14.2. UN proper shipping name: Chemical Kit 14.3. Class: 9 14.4. Packing group:

Road transport ADR

Classification code: M11 Tunnel restriction code: E

Limited Quantity: acc. ADR 3.3.1/251: see LQ in Alternative declaration for transportation

Air transport ICAO

PAX: 960 max. weight PAX: 10 KG CAO: 960 max. weight CAO: 10 KG Maritime transport IMDG

EmS: F-A, S-P Storage category: A

Or use Alternative declaration for transportation:



 MACHEREY-NAGEL GmbH & Co. KG
 DE
 Tel.: +49 24 21 969-0
 info@mn-net.com

 Valencienner Str. 11
 CH
 Tel.: +41 62 388 55 00
 sales-ch@mn-net.com

 52355 Düren · Germany
 FR
 Tel.: +33 388 68 22 68
 sales-fr@mn-net.com

www.mn-net.com US Tel.: +1 888 321 62 24 sales-us@mn-net.com



Safety Data Sheet

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

 REF: 730109
 Chromab. columns NAN, 3mL,400/1400/400mg
 Page: 8/10

 Printing date: 13.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

UN No.: (see below) class 8 II, Excepted Quantities (≤30 mL/∑≤500 mL) = ADR/ IATA E2

or

14.1 UN number: 3260 14.2 UN proper shipping name: Corrosive solid, acidic, inorganic, n.o.s. (silver nitrate mixture)

14.3 Class: 8 14.4 Packing group:

C.2

Road transport ADR Classification code:

Limited Quantity: 1 Kg Tunnel restriction code: E

Excepted Quantity: E 2

Air transport ICAO

Limited Quantity: LQ 23
Excepted Quantity: E 2

PAX: 859 max. weight PAX: 15 Kg
CAO: 863 max. weight CAO: 50 Kg

Maritime transport IMDG
EmS: F-A, S-B Storage category: I

14.5 Environmental hazards

none, contains only small amounts of these 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

Dangerous Substances Protection Act (DE: Chemikaliengesetz - ChemG), Aug 2013, Stand: Okt 2020

Ordinance on protection against dangerous substances (E: Gefahrstoffverordnung - GefStoffV), Nov 2010, Stand: Mrz 2017

TRGS 201, Classification and labeling of activities involving hazardous substances, Feb 2017

TRGS 220, National aspects when preparing safety data sheets, Jan 2017

TRGS 400, Risk assessment for activities involving hazardous substances, Jul 2017

TRGS 401, Skin contact hazard - identification, assessment, action, Jun 2008, status. Feb 2011

BekGS 408, Application of the GefStoffV and the TRGS with the entry into force of the CLP regulation, December 2009, status: Jan 2012

TRGS 500, Protective measures, Mai 2008

TRGS 510, Storage of hazardous substances in portable containers from March 2013, status: Oct 2015

Chapter 4, Measures when storing hazardous substances up to 50 kg (small quantity regulation)

Wasserhaushaltsgesetz - WHG, Section 3 Handling substances hazardous to water, Jul 2009, status: Aug 2016

If necessary, observe other country-specific regulations.

15.2 Chemical safety assessment

not necessary for these small amounts

SECTION 16: Other information

16.1 Changes compared to the last version

in preparation

16.2 List of H and P phrases

16.2.1 List of relevant H phrases

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

16.2.2 List of relevant P phrases

P260sh Do not breathe dust/vapours.
P280sh Wear protective gloves/eye protection.



MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com

CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com US Tel.: +1 888 321 62 24 sales-us@mn-net.com



Safety Data Sheet

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

REF: 730109 Chromab. columns NAN, 3mL,400/1400/400mg Page: 9/10 Printing date: 13.01.2023 Date of issue: 18.07.2022 Version: 2.2.2.2

> P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF IN EYES. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to P305+351+338

do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

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 Sources of key data

KÜHN, BIRETT, Leaflets on hazardous materials, 2021

Directive 97/69/EG, mineral fibersDirective 1999/92/EG Minimum requirements to improve the safety and health protection of workers at risk from potentially explosive atmospheres

TRGS 521, German engineering regulations for rehabilitation, repair and demolition with old mineral wool, February 2008, TRGS 521 "Mineral fibres" in the new versionSUVA .CH, limit values in the air at work 2009, revised on 01/2009

Regulation 790/2009/EU, adaptation of Regulation 1272/2008/EU to technical and scientific progress (1st ATP)

Regulation 453/2010/EU, adaptation of the REACH regulation 1907/2006/EG

TRGS 559, German technical rules for mineral dusts from July 2011 Regulation 487/2013/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (4th ATP)

Regulation 1221/2015/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (7th ATP) Regulation 776/2017/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (10th ATP)

Regulation 669/2018/EU, adaptation of Regulation 1272/2008/EC to technical and scientific progressText (11th ATP)

Regulation 1480/2018/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (13th ATP)

Regulation 521/2019/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (12th ATP)

TRGS 900, German rules of technology on limit values in the air at work, as of 03/2019
Regulation 217/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (14th ATP)

Regulation 878/2020/EU, adaptation of Annex II of the REACH regulation 1907/2006/EG

Regulation 1182/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (15th ATP) Regulation 643/2021/EU, adaptation of Annex VI, Part 1, of Regulation 1272/2008/EC to technical and scientific progress (16th ATP) Regulation 849/2021/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (17th ATP)

revisions/updates

Reason for revision: 2014-02 Corrected structure of the sections according to Regulation 453/2010/EU, if necessary

2014-04 adjustment according Regulation 487/2013/EU 2016-03 adjustment according Regulation 1221/2015/EU

2017-11 adjustment according the ECHA registration dossier 2022-11 adjustment according Regulation 878/2020/EU

16.5 **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.

Legend / Abbreviations 16.6

according acc:

ADR: Convention concerning the International Carriage of Dangerous Goods by Road

Act: acute

BAT: biological workplace tolerance value

Cargo Aircraft Only CAO:

carcinogen Carc:

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging regulation

CMR: carcinogen, mutagen, reproduction toxic

corrosive Corr-

COD. chemical oxigen demand

CSCL: Chemical Substance Control Law (Jp)

Dam:

Derived No-Effect Level (for workers) DNEL:

dermal derm: dog: dog



Software: M2 V 6.0.28.156

MACHEREY-NAGEL GmbH & Co. KG

Valencienner Str. 11 52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com

CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com

US Tel.: +1 888 321 62 24 sales-us@mn-net.com



Safety Data Sheet

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

 REF: 730109
 Chromab. columns NAN, 3mL,400/1400/400mg
 Page: 10/10

 Printing date: 13.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

EC10: Concentration causing a toxic effect in 10% of the test organisms

EC: European Community

EC-Nr: Substance number of the EC substance inventory EmS: Guide to accident management measures on ships

EU: European Union fish: fish (not spezified)

GHS: Global Harmonized System of Classification and Labeling of Chemicals

gpg: guinea pig ICAO: Internation

ICAO: International Civil Aviation Organization

ihl: inhaled

IMDG: International Maritime Dangerous Goods Code

intrav: intravenous ipt: intraperitonaeal

ISHL: Industrial Safety and Health Law (Jp)

LC50: letale concentration 50% LD50: letale dosis 50%

leuciscus idus: fisch, ide, orfe
MAK: maximum workplace concentration

Met: Metall mus: mouse Muta: mutagen

NIOSH: National Institute for Occupational Safety and Health (US)

NRD: Non-rapidly degradable

onchorhynchus mykiss: fish, rainbow trout

orl: oral

OSHA: Occupational Safety and Health Administration PAX: transport on passenger planes allowed persistent, bioaccumulating, toxic substance

pH: pH value

pimephales promelas: fish, fathead minnow PNEC: Predicted No Effected Concentration PROC 15: Process category 'for laboratory use'

PRTR: Law for PRTR and Promotion of Chemical Management (Jp)

PVC: polyvinyl chloride quail: bird, quail rat: rat rbt: rabbit

RD: rapidly degradable

RE: repeated

REACh: Registration, Evaluation, Authorisation and Restriction of Chemicals

REF: item number, reference number Reg.No.: rRegistration number

Reg.No.: rRegistration number
Repr: harmful to reproduction

Resp: respiratory

RIP: REACH Implementations Projects

scu: sub cutan SDS: safety data sheet Sens: sensitisation

STEL: short term exposure limit
STOT: Specific Target Organ Toxicity
SVHC: Substance of Very High Concern

t/a: tons per year

TCCA: Toxic Chemicals Control Act (S. Korea)

Tox: toxic

TSCA: The Toxic Substances Control Act (US)

TWA: time weighted average TRGS: technical regulations (DE)

vPvB: very persistent, very bioaccumulating substance

16.7 Training advice

Regular safety training. 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.



MACHEREY-NAGEL GmbH & Co. KG

Valencienner Str. 11 52355 Düren · Germany www.mn-net.com DE Tel.: +49 24 21 969-0 info@mn-net.com
CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com
FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com

US Tel.: +1 888 321 62 24 sales-us@mn-net.com