

# **Safety Data Sheet**

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

Arsenic test paper(mercury bromide pap.) Page: 1/7

Date of issue: 16.05.2018 Printing date: 01.10.2019

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

#### 1.1 **Product identifier**

REF 90762

Product name Arsenic test paper(mercury bromide pap.)

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 200 strips Arsenic test paper

#### 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

Neumann-Neander-Str. 6-8, 52355 Dueren, GERMANY

Tel.: +49 2421 969 0

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

US:

#### 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

200 strips Arsenic test paper





GHS08

WARNING Signal word

Hazard identification	Hazard classes/categories
H302	Acute Tox. 4 oral
H312	Acute Tox. 4 derm.
H332	Acute Tox. 4 inh.
H373	STOT RE 2
H413	Aquatic Chronic 4

#### 2.2 Label elements

According CLP directive inner packages must be only labelled with GHS symbol(s) and product identificator(s) (EU 1272/2008 Annex I

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).

www.mn-net.com



MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany

DE/international: CH: FR:

Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 +1 484 821 1272 Fax: Version: M V 4.10.1 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



# Safety Data Sheet

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

REF: 90762 Arsenic test paper(mercury bromide pap.) Page: 2/7

Printing date: 01.10.2019 Date of issue: 16.05.2018

### 200 strips Arsenic test paper





GHS08

Signal word: WARNING

#### 2.3 Other hazards

Possible hazards from physicochemical properties

Information pertaining to particular risks to human and possible symptoms

Cause after oral intake, inhalation of vapours/dust, impairments of health when ingested in small quantities. Can accumulate within the body.

Information pertaining to particular risks to the environment

Other hazards

## **SECTION 3: Composition/information on ingredients**

#### 3.1 **Substances or 3.2 Mixtures**

200 strips Arsenic test paper

mercury(II) bromide Chemical: CAS No.: 7789-47-1

Classification: H300, Acute Tox. 2 oral, H310, Acute Tox. 2 derm., H330, Acute Tox. 2 inh., H373, STOT RE 2,

H400, Aquatic Acute 1, H410, Aquatic Chronic 1

Formula: HgBr<sub>2</sub> TSCA Inventory: listed

EC No.: 232-169-3 Indice No : 080-004-00-7

RTECS: OV7415000

KE No .: KE-23120, Toxic 97-1-140

Concentration: 0,9 - <3,6 % Correlation factor: x 0.56 (= %Hg)
The classification refers to weight percent of the metal (according to CLP Regulation 2008/1272/EC Annex VI, 1.1.3.2 Note 1)

H302, Acute Tox. 4 oral, H312, Acute Tox. 4 derm., H332, Acute Tox. 4 inh., H373, STOT RE 2, acc. CLP (GHS):

H413, Aquatic Chronic 4

filter paper (cellulose CAS 9004-34-6) Chemical: CAS No .: -

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

Formula: (C<sub>6</sub> H<sub>10</sub> O<sub>5</sub> )<sub>n</sub> TSCA Inventory: listed

REACH Reg. No.: exempt, Annex IV 232-674-9 EC No.: RTECS: FJ5691460 KF-05339 KF No . 80 - <100 % Concentration:

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

### 3.3

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 dust with wetted tissue. Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water.

www.mn-net.com

US:



MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany

DE/international: CH: FR:

Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 +1 484 821 1272 Fax: Version: M V 4.10.1 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



# Safety Data Sheet

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

Arsenic test paper(mercury bromide pap.) Page: 3/7 Date of issue: 16.05.2018 Printing date: 01.10.2019

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 with eye washing bottle, eye douche or running water (protect intact eye).

4.1.3 After INHALATION of vapours

After inhalation of dust fresh air should be inhaled. ---

414 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

Can accumulate within the body. ---

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

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

Regular staff training is necessary.

6.2 **Environmental precautions** 

not necessary

6.3 Methods and material for containment and cleaning up

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): 6.1B

Water hazard class (DE):

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

200 strips Arsenic test paper

www.mn-net.com

US:

MACHEREY-NAGE (MN)

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany

DE/international: CH: FR:

Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 +1 484 821 1272 Fax: Version: M V 4.10.1 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



# Safety Data Sheet

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

REF: 90762 Arsenic test paper(mercury bromide pap.) Page: 4/7

Printing date: 01.10.2019 Date of issue: 16.05.2018

> mercurv(II) bromide CAS No.: 7789-47-1 Chemical:

[Hg] 0.02 e mg/m<sup>3</sup> FU value: TRGS 900 (DE): [Hg] 0,02 E mg/m<sup>3</sup> E/e respirable

Short-term exposure factor: 8 (II), H, Sh

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

SUVA(CH) MAK value: [Hg][MAK] 0,02 e/[STEL] 0,16 e mg/m<sup>3</sup>

SUVA(CH) BAT value: [Krea U/d] 35 µg/L TRGS 903 (DE):

[U/aκ<sub>reatinin</sub>] 25 μg/g B blood, U urine, a no limitation, b end of exposition or shift

: [Hg vapor, TWA<sub>skin</sub>] 0.05; other 0.1 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] 0.1 mg/m<sup>3</sup>

Chemical: filter paper (cellulose CAS 9004-34-6) CAS No .: -

TRGS 900 (DE): 1.25 A / 4 E mg/m<sup>3</sup> E/e respirable

SUVA(CH) MAK value: 3 a mg/m<sup>3</sup> not listed

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

OSHA:

#### 8.2 **Exposure controls**

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

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

200 strips Arsenic test paper

Appearance: solid Colour: colourless Odor: odorless

9.2 Other information

**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

www.mn-net.com

US:

MACHEREY-NAGE (MN)

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany

DE/international: CH: FR:

Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 Fax: +1 484 821 1272 Version: M V 4.10.1 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



# Safety Data Sheet

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

REF: 90762 Arsenic test paper(mercury bromide pap.) Page: 5/7

Date of issue: 16.05.2018 Printing date: 01.10.2019

#### 10.5 Incompatible materials

Avoid contact with concentrated acids and oxidizing agents. 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.

### 200 strips Arsenic test paper

Chemical: CAS No.: 7789-47-1 mercury(II) bromide TSCA Inventory: California Proposition 65 List: listed developmental

inhalation, skin absorption, ingestion, skin and/or eye contact **Exposure Routes:** Target Organs: Eyes, skin, respiratory system, central nervous system, kidneys

Symptoms: irritation eyes, skin; cough, chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis; tremor,

insomnia, irritability, indecision, headac

Japan CSCL/PRTR: PRTR: ≥1,0%Hg class I, Japan PDSCL: Poisonous substance

Japan ISHL: listed ≥0,3%/≥0,1% Korea Exist.Chem.Inventory: KE-23120, Toxic 97-1-140

LD50<sub>orl rat</sub>: 40 mg/kg LC\_Lowskn rbt: 41 mg/kg LD50<sub>drm rat</sub>: 100 mg/kg

Acute Effects: Cause after oral intake, inhalation of vapours/dust, skin contact, impairments of health when ingested in small

Chronic Effects: May cause damage to organs through prolonged or repeated exposure.

TRGS 907 (DE):

Chemical: filter paper (cellulose CAS 9004-34-6) CAS No .: -

TSCA Inventory: California Proposition 65 List: not listed Australia NICNAS: not listed Canada CEPA 1999: DSL yes

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

Japan ISHL: not listed South Korea TCCA: not listed Korea Exist.Chem.Inventory: KE-05339 LD50<sub>orl rat</sub>: >5000 mg/kg LC50<sub>ihl rat</sub>: >5800<sub>4h</sub> mg/m<sup>3</sup> LD50<sub>drm rbt</sub>: >2000 mg/kg

# **SECTION 12: Ecological information**

#### 12.1 **Toxicity**

Following information is valid for pure substances.

200 strips Arsenic test paper

mercury(II) bromide May cause long lasting harmful effects to aquatic life. Avoid contact of substance/mixture to environment. Environmental hazards must not be labelled with P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).

LC<sub>50</sub>: 0.5<sub>HgCl2/48h</sub> mg/m<sup>3</sup> 3 WGK No.: 0398 Bio Toxicity: Water hazard class (DE):

61B Storage class (VCI):

filter paper (cellulose CAS 9004-34-6) Chemical: CAS No .: -

Water hazard class (DE): nwg Storage class (VCI):

#### 12.2 Persistence and degradability

not necessary

www.mn-net.com

US:

MACHEREY-NAGE (MN)

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany

DE/international: CH: FR:

Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 Fax: +1 484 821 1272 Version: M V 4.10.1 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



# **Safety Data Sheet**

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

REF: 90762 Arsenic test paper(mercury bromide pap.) Page: 6/7
Printing date: 01.10.2019 Date of issue: 16.05.2018

### 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

# **SECTION 14: Transport information**

14.1 - 14.4: No dangerous goods according the transport regulations

### 14.5 Environmental hazards

none

### 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

H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H413 May cause long lasting harmful effects to aquatic life.

### 16.1.2 List of relevant P phrases

P260sh Do not breathe dust/vapours. P261sh Avoid breathing dust/vapours.

P264W Wash with water thoroughly after handling.
P273 Avoid release to the environment.
P280sh Wear protective gloves/eye protection.

P301+312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P302+352 IF ON SKIN: Wash with plenty of water.

P330 Rinse mouth.

www.mn-net.com

US:



MACHEREY-NAGEL GmbH & Co. KG  $\cdot$  Neumann-Neander-Str. 6–8  $\cdot$  52355 Düren  $\cdot$  Germany

DE/international: CH: FR:

Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 +1 484 821 1272 Fax:

Version: M V 4.10.1 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



# **Safety Data Sheet**

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

Arsenic test paper(mercury bromide pap.) Page: 7/7 Printing date: 01.10.2019 Date of issue: 16.05.2018

#### 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, 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 TRGS 900, German engineering rules governing limits in air at work, updated 03/2018 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

www.mn-net.com

MN>

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany DE/international: CH: FR:

US: Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 Fax: +1 484 821 1272

Version: M V 4.10.1 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com