

Safety Data Sheet

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

REF: 90762

Arsenic test paper(mercury bromide pap.)

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Printing date: 17.03.2017

Date of issue: 17.03.2017

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: 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

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

200 strips Arsenic test paper

Directive 1999/45/EC

Symbols

R 23/24/25-33



T

CLP Directive 1272/2008/EC

GHS pictograms



GHS07

GHS08

Signal word

WARNING

Hazard identification

Hazard classes/categories

H302	Acute Tox. resp. cat. 4
H312	Acute Tox. derm. cat 4
H332	Acute Tox. inh. cat. 4
H373	STOT RE 2
H413	Hazardous to the aquatic environment - chronic cat. 4

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2.2 Label elements

According 1999/45/EC small amounts of harmful and highly flammable preparations/mixtures have partly/completely exemption from labelling (no symbols F, O, Xn, Xi, N and no R and S phrases are necessary) until **25-125 mL/g**.

According **CLP (GHS)** inner packages must be only labelled with symbol(s) and product identifier (EU 1272/2008 Annex I - 1.5.1.2). 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).

200 strips Arsenic test paper

Directive 1999/45/EC

Symbols:



T

R 23/24/25-33

Toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects.

S 13-28-45-60-61

Keep away from food, drink and animal feedingstuffs. After contact with skin, wash immediately with plenty of water. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/Safety data sheets.

CLP Directive 1272/2008/EC

GHS pictograms:



GHS07



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

Chemical: *mercury(II) bromide*

CAS No.: 7789-47-1

Concentration: 0,9 - <3,6 %

Correlation factor: x 0.56 (= %Hg)

Formula: HgBr₂

EC No.: 232-169-3

Indice No.: 080-004-00-7

RTECS: OV7415000

TSCA Inventory: listed

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

acc. 1999/45/EC: R 23/24/25-33-52/53

acc. CLP (GHS): H302, H312, H332, H373, H413

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Chemical:	<i>filter paper (cellulose CAS 9004-34-6)</i>	CAS No.:	-
Concentration:	80 - <100 %		
Formula:	(C ₆ H ₁₀ O ₅) _n		
REACH Reg. No.:	exempt, Annex IV		
EC No.:	232-674-9		
RTECS:	FJ5691460		
TSCA Inventory:	listed		
KE No.:	KE-05339		
acc. 1999/45/EC:	-	acc. CLP (GHS):	not necessary

3.3 Remarks

List of R, H and P phrases: see section 16.

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.

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.

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

Avoid inhalation of dust. 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

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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): 3

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

Chemical: *mercury(II) bromide*

CAS No.: 7789-47-1

EU value: 0.02Hg e mg/m³

TRGS 900 (DE): 0,02Hg E mg/m³
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: 0,1 e mg/m³

SUVA(CH) BAT value: Krea U/d 35 µg/L

TRGS 903 (DE): U/a 25Kreatinin µg/g
B blood, U urine

NIOSH: Hg Vapor: TWA_{skin} 0.05; other 0.1 mg/m³

OSHA: TWA 0.1 mg/m³

Chemical: *filter paper (cellulose CAS 9004-34-6)*

CAS No.: -

TRGS 900 (DE): 1.25 A / 4 E mg/m³
E/e respirable

SUVA(CH) MAK value: 3 a mg/m³

NIOSH: not listed

OSHA: not listed

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 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.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

200 strips Arsenic test paper

Appearance: solid

Color: colourless

Odor: odorless

9.2 Other information

Relevant Properties of Substance Group

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No known instability.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

10.5 Incompatible materials

Not necessary. Avoid contact with concentrated acids and oxidizing agents.

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: *mercury(II) bromide*

CAS No.: 7789-47-1

TSCA Inventory: listed

California Proposition 65 List: listed developmental

Exposure Routes:

inhalation, skin absorption, ingestion, skin and/or eye contact

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_{orl rat} :

40 mg/kg

LC₅₀_{skn rbt} :

41 mg/kg

LD50_{drm rat} :

100 mg/kg

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

quantities.

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

TRGS 907 (DE):

Sh

Chemical:

filter paper (cellulose CAS 9004-34-6)

CAS No.: -

TSCA Inventory:

listed

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_{orl rat} :

>5000 mg/kg

LC50_{ihl rat} :

>5800_{4h} mg/m³

LD50_{drm rbt} :

>2000 mg/kg

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SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

200 strips Arsenic test paper

Chemical: *mercury(II) bromide* CAS No.: 7789-47-1
 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).
 Bio Toxicity: LC₅₀: 0.5HgCl₂/48h mg/m³
 Water hazard class (DE): 3 WGK No.: 0398
 Storage class (VCI): 6.1 B

Chemical: *filter paper (cellulose CAS 9004-34-6)* CAS No.: -
 Water hazard class (DE): nwg
 Storage class (VCI): 11

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

SECTION 14: Transport information

14.1 - 14.4: No dangerous goods according the transport regulations

14.5 Environmental hazards

not necessary

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

15.2 Chemical safety assessment

not necessary for these small amounts

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SECTION 16: Other Information

16.1 List of R, H and P phrases

16.1.1 List of relevant R phrases

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
 R33 Danger of cumulative effects.
 R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16.1.2 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.

16.1.3 List of relevant P phrases

P260sh Do not breathe dust/vapours.
 P261sh Avoid breathing dust/vapours.
 P273 Avoid release to the environment.
 P280sh Wear protective gloves/eye protection.
 P302+352 IF ON SKIN: Wash with plenty of water/...

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.
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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
 TRGS 900, German engineering rules governing limits in air at work, updated September 2016
 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

You find our current versions of MSDS in Internet:
<http://www.mn-net.com/MSDS>