

# Safety Data Sheet

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

REF: 90722 Ammonium test paper Page: 1/8  
 Printing date: 17.03.2017 Date of issue: 28.02.2017

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

### 1.1 Product identifier

REF 90722  
 Product name Ammonium test paper

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 AMMONIUM testpaper (31 g)

### 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 AMMONIUM testpaper (31 g)

Directive 1999/45/EC

Symbols R 26/27/28-33  
  
 T+

CLP Directive 1272/2008/EC

GHS pictograms  
  
  
 GHS06 GHS08

Signal word DANGER

**Hazard identification** **Hazard classes/categories**

H301	Acute Tox. 3 oral
H311	Acute Tox. 3 derm.
H331	Acute Tox. 3 inh.
H373	STOT RE 2
H411	Hazardous to the aquatic environment - chronic cat. 2

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## 2.2 Label elements

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

### 200 strips AMMONIUM testpaper (31 g)

Directive 1999/45/EC

Symbols:



T+

R 26/27/28-33

Very 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:



GHS06



GHS08

Signal word: DANGER

H301, H311, H331

Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.

P261sh, P280sh, P302+352, P311, P405

Avoid breathing dust/vapours. Wear protective gloves/eye protection. IF ON SKIN: Wash with plenty of water/... Call a POISON CENTER/doctor/... Store locked up.

## 2.3 Other hazards

### Possible Hazards from physicochemical Properties

#### Information pertaining to particular Risks to Human and possible Symptoms

Cause severe after oral intake, inhalation of vapours, skin contact, impairments of health or can lead to death even when only ingested in small quantities. Can accumulate within the body.

#### Information pertaining to particular Risks to the Environment

Avoid contact of substance/mixture to environment.

**PBT:** not applicable

**vPvB:** not applicable

#### Other Hazards

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## SECTION 3: Composition/Information on Ingredients

### 3.1 Substances or 3.2 Mixtures

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Chemical:	<i>potassium tetraiodomercurate(II)</i>	CAS No.:	7783-33-7
Concentration:	9,8 - <25 %	Correlation factor:	x 0.26 (= %Hg)
Formula:	K <sub>2</sub> (Hgl <sub>4</sub> )	Indice No.:	080-004-00-7
EC No.:	231-990-4-8		
RTECS:	OJ9670000		
TSCA Inventory:	listed		
KE No.:	KE-12197, Toxic 97-1-140		
acc. 1999/45/EC:	R 26/27/28-33-51/53	acc. CLP (GHS):	H301, H311, H331, H373, H411
Chemical:	<i>filter paper (cellulose CAS 9004-34-6)</i>	CAS No.:	-
Concentration:	10 - <80 %		
Formula:	(C <sub>6</sub> H <sub>10</sub> O <sub>5</sub> ) <sub>n</sub>		
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. Remove contaminated clothing. Show product package, packing insert and this material safety data sheet to the doctor. Take to a doctor, in a raised position if there are breathing difficulties.

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

#### 4.1.3 After INHALATION of Vapours

If vomiting and if insensible place patient in recovery position and keep airways free. Administer a Dexamethasone spray as soon as possible. Ensure quiet, warmth, and provide resuscitation if necessary. In the event of respiratory distress ensure that the patient inhales oxygen. Secure the breathing, heart and circulatory function. 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.

### 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

After SKIN CONTACT rinse with water for a long time. Apply glucocorticosteroides following inflammatory reactions. In the event of RESPIRATORY DISTRESS ensure that the patient inhales oxygen. TOXIFICATION: Treat symptomatically. Secure the breathing, heart and circulatory function. Remove the substance quickly from the body. Mechanically induce vomiting or ensure the patient eats medicinal charcoal compressed tablets or drinks aluminium oxide drug suspensions. In order to ensure rapid passage through the colon (administer 2 tablespoons of dissolved Glauber's salt). Alleviation of pain, if necessary sedation. Shock treatment. Administer a prophylaxis to counter pulmonary oedema. ---

## 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

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## 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

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, contains only small amounts of these substances

### 6.3 Methods and material for containment and cleaning up

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 ---

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product. Use only in well-ventilated working areas.

### 7.2 Conditions for safe storage, including any incompatibilities

The original product package of MACHEREY-NAGEL allows a safe storage. Products containing also toxic substances should be kept locked up.

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, and store in a well-ventilated place at max. 25 °C, away or preferably separate from substances with which a hazardous reaction could take place, so that they are not immediately accessible to outside parties. 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

#### 200 strips AMMONIUM testpaper (31 g)

Chemical: *potassium tetraiodomercurate(II)*

CAS No.: 7783-33-7

EU value: 0,02Hg e mg/m<sup>3</sup>

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

Short-term exposure factor: 8 (H), 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/m<sup>3</sup>

SUVA(CH) BAT value: Krea U/d 35 µg/L

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

NIOSH: Hg Vapor: TWA<sub>skin</sub> 0.05; other 0.1 mg/m<sup>3</sup>

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>

NIOSH: not listed

OSHA: not listed

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## 8.2 Exposure controls

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

### 8.2.1 Respiratory Protection

Use for open access of these substances for example a protection filter, class A/AX. 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.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

200 strips AMMONIUM testpaper (31 g)

Appearance: solid

Color: white

Odor: odorless

### 9.2 Other information

Relevant Properties of Substance Group

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## 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

Not necessary. ---

### 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 AMMONIUM testpaper (31 g)

Chemical:	<i>potassium tetraiodomercurate(II)</i>	CAS No.:	7783-33-7
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%

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Korea Exist.Chem.Inventory: KE-12197, Toxic 97-1-140

LD50<sub>orl rat</sub>: HgI<sub>2</sub> 18 mg/kg

LC<sub>Low orl hmn</sub>: 357 mg/kg

LD50<sub>drm rat</sub>: 75 mg/kg

Acute Effects: Cause severe after oral intake, inhalation of vapours, skin contact, impairments of health or can lead to death even when only 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<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 AMMONIUM testpaper (31 g)

Chemical: *potassium tetraiodomercurate(II)* CAS No.: 7783-33-7

Toxic to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment.

Environmental hazards must not be labelled with H and P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).

Bio Toxicity: LC<sub>50</sub>: 0.5HgCl<sub>2</sub>/48h mg/L

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

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). Close container tightly.

### 13.1 Waste treatment methods

Dispose of contents/container to regulated waste treatment.

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## 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:** II  
*Road transport*  
 Classification code: M11    Tunnel restriction code: E  
 Limited Quantity: acc. ADR 3.3.1/251: see LQ in Alternative transport labelling  
*Air transport*  
 PAX: 960    max. weight PAX: 10 KG  
 CAO: 960    max. weight CAO: 10 KG  
*Maritime transport*  
 EmS: F-A, S-P    Storage category: A

Alternative transport labelling follows:

**14.1 UN number:** 3288  
**14.2 UN proper shipping name:** Toxic solid, inorganic, n.o.s. (potassium tetraiodomercurate(II) mixture)  
**14.3 Class:** 6.1    **14.4 Packing group:** II  
*Road transport*  
 Classification code: T5    Tunnel restriction code: E  
 Limited Quantity: 500 g  
 Excepted Quantity: E 4  
*Air transport*  
 PAX: 669    max. weight PAX: 25 Kg  
 CAO: 676    max. weight CAO: 100 Kg  
*Maritime transport*  
 EmS: F-A, S-A    Storage category: B

### 14.5 Environmental hazards

not necessary, 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

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

## SECTION 16: Other Information

### 16.1 List of R, H and P phrases

#### 16.1.1 List of relevant R phrases

R26/27/28    Very toxic by inhalation, in contact with skin and if swallowed.  
 R33    Danger of cumulative effects.  
 R51/53    Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 16.1.2 List of relevant H phrases

H301    Toxic if swallowed.  
 H311    Toxic in contact with skin.  
 H331    Toxic if inhaled.  
 H373    May cause damage to organs through prolonged or repeated exposure.  
 H411    Toxic to aquatic life with long lasting effects.

#### 16.1.3 List of relevant P phrases



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P260sh	Do not breathe dust/vapours.
P261sh	Avoid breathing dust/vapours.
P273	Avoid release to the environment.
P280sh	Wear protective gloves/eye protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...
P302+352	IF ON SKIN: Wash with plenty of water/...
P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P311	Call a POISON CENTER/doctor/...
P312	Call a POISON CENTER/doctor/.../if you feel unwell.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

## 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 DE §§ 4 und 5 MuSchRIV)!

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, 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 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>