

Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue: 20.08.2004 Supersedes edition of 06.04.2004

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No.

 $1.14750.0001\ 0.010 - 3.00\ \text{mg/l}\ \text{NH}_4\text{-N}$ 500 Tests

0.013 - 3.86 mg/l NH₄⁺ Spectroquant®

 $NH_{4}-1$

Use of the substance/preparation

Reagent for analysis

Company/undertaking identification

Company: Merck KGaA * 64271 Darmstadt * Germany * Tel: +49 (0)6151/72-0

Emergency telephone No.: +49 (0)6151/72112 * Fax: +49 (0)6151/72-7780

2. Composition/information on ingredients

Aqueous solution of inorganic and organic compounds.

Hazardous ingredients:

Name according to EC Directives:

CAS-No. EC No. EC-Index-No. Classification Content:

Sodium hydroxide

1310-73-2 215-185-5 011-002-00-6 C; R35 $\geq 2 - < 5\%$

(Full text of R-Phrases in heading 16)

3. Hazards identification

Causes burns.

4. First aid measures

After inhalation: fresh air. Call in physician.

After skin contact: wash off with plenty of water. Dab with polyethylene glycol 400.

Immediately remove contaminated clothing.

After eye contact: rinse out with plenty of water for at least 10 minutes with the eyelid

held wide open. Immediately call in ophtalmologist.

After swallowing: make victim drink plenty of water (if necessary several litres), avoid vomiting (risk of perforation!). Immediately call in physician. Do not attempt to neutralize.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 NH_4-1

5. Fire-fighting measures

Suitable extinguishing media:

In adaption to materials stored in the immediate neighbourhood.

Special risks:

Non-combustible. Ambient fire may liberate hazardous vapours.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Other information:

Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental release measures

Person-related precautionary measures:

Do not inhale vapours/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

Environmental-protection measures:

Do not allow to enter sewerage system.

Procedures for cleaning / absorption:

Take up with liquid-absorbent and neutralizing material (e.g. Chemizorb® OH-, Art. No.

101596). Forward for disposal. Clean up affected area.

7. Handling and storage

Handling:

No further requirements.

Storage:

Tightly closed. At $+15^{\circ}$ C to $+25^{\circ}$ C.

The data apply to the entire pack.

8. Exposure controls/personal protection

Specific control parameter

TRGS 900

Name Sodium hydroxide

Value 2 mg/m³ inhalable fraction

Peak limit =1= Concentration must not exceed limit concentration.

Y Substances with which no foetotoxic risk is to be expected when observing the maximum allowable concentration (MAC)

when observing the maximum allowable concentration (MAC Germany) and the biological tolerance value at the workplace

(BAT Germany).

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 $NH_{4}-1$

Personal protective equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when vapours/aerosols are generated.

Eye protection: required

Hand protection: In full contact:

Glove material: nitrile rubber
Layer thickness: 0.11 mm
Breakthrough time: > 480 Min.

In splash contact:

Glove material: nitrile rubber
Layer thickness: 0.11 mm
Breakthrough time: > 480 Min.

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 740 Dermatril® (full contact), 740 Dermatril® (splash contact).

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Industrial hygiene:

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

9. Physical and chemical properties

Form: liquid Colour: colourless

Odour: characteristic odour

pH value $(20 \,^{\circ}\text{C})$ ~ 13

Melting point not available
Boiling point not available
Ignition temperature not available
Flash point not available
Explosion limits lower not available
upper not available

 $(20 \, ^{\circ}\text{C})$ ~ 1.20 g/cm³

Solubility in

Density

water (20 °C) soluble

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 NH_4-1

10. Stability and reactivity

Conditions to be avoided

Heating.

Substances to be avoided

acids, phosphides, organic nitro compounds, acid halides, halogenated hydrocarbons, light metals in powder form, lead, polymerizable substances.

Hazardous decomposition products

no information available

11. Toxicological information

Acute toxicity

Quantitative data on the toxicity of this product are not available.

Further toxicological information

Property that must be anticipated on the basis from the components of the preparation:

After inhalation: burns of mucous membranes.

After skin contact: burns, necrosis.

After eye contact: burns, necrosis, Risk of blindness!

After swallowing: Burns of: mouth, pharynx, mucous membrane, oesophagus gastrointestinal tract. Risk

of perforation in the oesophagus and stomach.

Systemic effects: collapse, death.

Further data

Further hazardous properties cannot be excluded.

The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

Ecotoxic effects:

Quantitative data on the ecological effect of this product are not available.

Further ecologic data:

A harmful effect on aquatic organisms cannot be excluded in the event of improper handling or disposal.

Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

Product:

Chemicals must be disposed of in compliance with the respective national regulations. Under www.retrologistik.de you will find country- and substance-specific information as well as contact partners.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 $NH_{4}-1$

Packaging:

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under www.retrologistik.de you will find special information on the respective national conditions as well as contact partners.

14. Transport information

Road & Rail ADR, RID

UN 1824 NATRIUMHYDROXIDLOESUNG, 8, II

Inland waterway ADN, ADNR not tested

Sea IMDG-Code

UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

Ems F-A S-B

Air CAO, PAX

SODIUM HYDROXIDE SOLUTION, 8, UN 1824, II

The transport regulations are cited according to international regulations and in the form applicable in Germany . Possible national deviations in other countries are not considered. THESE TRANSPORT DATA APPLY TO THE ENTIRE PACK!

15. Regulatory information

Labelling according to EC Directives

Symbol: C Corrosive R-phrases: 34 Causes burns.

S-phrases: 26-36/37/39-45 In case of contact with eyes, rinse immediately

with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the

label where possible).

contains: Sodium hydroxide

German regulations

Water pollution class 1 (slightly polluting substance) VwVwS Anh. 4

Storage class VCI 8 B

Data sheet of the Chemical Professional Association

M004 Irritant substances/corrosive substances

M051 Dangerous chemical substances

M053 General industrial safety measures for dangerous substances.

The employment restrictions for young workers in accordance with section 22 of the Youth Employment Protection Law (JArbSchG) are to be observed.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001 0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant® Product name:

 $NH_{4}-1$

16. Other information

Text of any R phrases referred to under heading 2:

35 Causes severe burns.

Reason for alteration

Chapter 14: transport information.

General update.

Contact for information:

HSSE-C/CI * Tel: +49 (0)6151/722775 * Fax: +49 (0)6151/726433 * e-mail:prodsafe@merck.de

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.



Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue: 20.08.2004 Supersedes edition of 06.04.2004

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No.

 $1.14750.0001\ 0.010 - 3.00\ \text{mg/l}\ \text{NH}_4\text{-N}$ 500 Tests

0.013 - 3.86 mg/l NH₄⁺ Spectroquant®

 NH_4-2

Use of the substance/preparation

Reagent for analysis

Company/undertaking identification

Company: Merck KGaA * 64271 Darmstadt * Germany * Tel: +49 (0)6151/72-0

Emergency telephone No.: +49 (0)6151/72112 * Fax: +49 (0)6151/72-7780

2. Composition/information on ingredients

Preparation contains inorganic and organic compounds.

Hazardous ingredients:

Name according to EC Directives:

CAS-No. EC No. EC-Index-No. Classification Content:

sodium dichloroisocyanurate, dihydrate

51580-86-0 220-767-7 613-030-01-7 Xn; R22 $\geq 0.25 - < 1 \%$

Xi; R36/37 R31 N; R50/53

(Full text of R-Phrases in heading 16)

3. Hazards identification

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing. After eye contact: rinse out with plenty of water with the eyelid held wide open. After swallowing: make victim drink plenty of water. Consult doctor if feeling unwell.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 NH_4-2

5. Fire-fighting measures

Suitable extinguishing media:

In adaption to materials stored in the immediate neighbourhood.

Special risks:

Non-combustible. Ambient fire may liberate hazardous vapours. The following may develop in event of fire: hydrochloric acid, sulfur oxides.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Other information:

Prevent fire-fighting water from entering surface water or groundwater. Contain escaping vapours with water.

6. Accidental release measures

Person-related precautionary measures:

Avoid inhalation of dusts.

Environmental-protection measures: Do not allow to enter sewerage system.

Procedures for cleaning / absorption:

Take up dry. Forward for disposal. Clean up affected area. Avoid generation of dusts.

7. Handling and storage

Handling:

No further requirements.

Storage:

Tightly closed. Dry. At $+15^{\circ}$ C to $+25^{\circ}$ C.

The data apply to the entire pack.

8. Exposure controls/personal protection

Personal protective equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when dusts are generated.

Eye protection: required

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N $^{1}500$ Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 NH_4-2

Hand protection: In full contact:

Glove material: nitrile rubber
Layer thickness: 0.11 mm
Breakthrough time: > 480 Min.

In splash contact:

Glove material: nitrile rubber
Layer thickness: 0.11 mm
Breakthrough time: > 480 Min.

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 740 Dermatril® (full contact), 740 Dermatril® (splash contact).

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Industrial hygiene:

Change contaminated clothing. Wash hands after working with substance.

9. Physical and chemical properties

Form: solid
Colour: white
Odour: odourless

pH value not available

Melting point not available

Boiling point not available

Ignition temperature not available

Flash point not available

Explosion limits lower not available

upper not available

Density not available

Solubility in

water (20 °C) soluble

10. Stability and reactivity

Conditions to be avoided

Strong heating.

Substances to be avoided

no information available

Hazardous decomposition products

in the event of fire: See chapter 5.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 $NH_{4}-2$

11. Toxicological information

Acute toxicity

Quantitative data on the toxicity of this product are not available.

Further toxicological information

Effect that cannot be excluded on the basis of the components of the preparation:

After eye contact: slight irritation symptoms.

After swallowing: Slight irritations of: mucous membrane.

Further data

Further hazardous properties cannot be excluded.

The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

Ecotoxic effects:

Quantitative data on the ecological effect of this product are not available.

Biological effects:

Harmfull effect on aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Further ecologic data:

Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

Product:

Chemicals must be disposed of in compliance with the respective national regulations. Under www.retrologistik.de you will find country- and substance-specific information as well as contact partners.

Packaging:

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under www.retrologistik.de you will find special information on the respective national conditions as well as contact partners.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N $^{1}500$ Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 $NH_{4}-2$

14. Transport information

Road & Rail ADR, RID

UN 1824 NATRIUMHYDROXIDLOESUNG, 8, II

Inland waterway ADN, ADNR not tested

Sea IMDG-Code

UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

Ems F-A S-B

Air CAO, PAX

SODIUM HYDROXIDE SOLUTION, 8, UN 1824, II

The transport regulations are cited according to international regulations and in the form applicable in Germany . Possible national deviations in other countries are not considered.

THESE TRANSPORT DATA APPLY TO THE ENTIRE PACK!

15. Regulatory information

Labelling according to EC Directives

Symbol: ---

R-phrases: 52/53 Harmful to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

S-phrases: ---

German regulations

Water pollution class 2 (polluting substance) VwVwS Anh. 4

Storage class VCI 10-13

The employment restrictions for young workers in accordance with section 22 of the Youth Employment Protection Law (JArbSchG) are to be observed.

16. Other information

Text of any R phrases referred to under heading 2:

Harmful if swallowed.

31

36/37 Irritating to eyes and respiratory system.

Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Reduced labelling on the container due to small quantity.

Reason for alteration

Chapter 14: transport information.

General update.

Contact for information:

HSSE-C/CI * Tel: +49 (0)6151/722775 * Fax: +49 (0)6151/726433 * e-mail:prodsafe@merck.de

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001 0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant® Product name:

 $NH_{4}-2$

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.



Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue: 20.08.2004 Supersedes edition of 06.04.2004

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No.

 $1.14750.0001\ 0.010 - 3.00\ \text{mg/l}\ \text{NH}_4\text{-N}$ 500 Tests

0.013 - 3.86 mg/l NH₄⁺ Spectroquant®

 NH_4 -3

Use of the substance/preparation

Reagent for analysis

Company/undertaking identification

Company: Merck KGaA * 64271 Darmstadt * Germany * Tel: +49 (0)6151/72-0

Emergency telephone No.: +49 (0)6151/72112 * Fax: +49 (0)6151/72-7780

EC-Index-No.

2. Composition/information on ingredients

Aqueous solution of organic compounds.

Hazardous ingredients:

Name according to EC Directives:

EC No.

Sodium nitroprusside 14402-89-2 238-373-9 T; R25 ≥ 3 - < 25 %

Classification

Thymol

CAS-No.

89-83-8 201-944-8 604-032-00-1 Xn; R22 ≥ 1 - < 5 % C: R34

N; R51/53

2-Propanol

67-63-0 200-661-7 603-117-00-0 F; R11 \geq 20 - < 50 % Xi; R36

R67

(Full text of R-Phrases in heading 16)

3. Hazards identification

Flammable. Harmful if swallowed. Irritating to eyes. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Vapours may cause drowsiness and dizziness.

4. First aid measures

After inhalation: fresh air. Consult doctor if feeling unwell.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in

ophtalmologist.

After swallowing: immediately make victim drink plenty of water. Call in physician.

Content:

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N $^{1}500$ Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 NH_4-3

5. Fire-fighting measures

Suitable extinguishing media: Water, CO₂, foam, powder.

Special risks:

Combustible. Vapours heavier than air. Forms explosive mixtures with air at ambient temperatures.

Development of hazardous combustion gases or vapours possible in the event of fire.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus.

Other information:

Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental release measures

Person-related precautionary measures:

Do not inhale vapours/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

Environmental-protection measures:

Do not allow to enter sewerage system; risk of explosion!

Procedures for cleaning / absorption:

Take up with liquid-absorbent material (e.g. Chemizorb®). Forward for disposal. Clean up affected area.

7. Handling and storage

Handling:

Notes for prevention of fire and explosion:

Keep away from sources of ignition. Take measures to prevent electrostatic charging.

Notes for safe handling:

Work under hood. Do not inhale substance. Avoid generation of vapours/aerosols.

Storage:

Tightly closed. At $+15^{\circ}$ C to $+25^{\circ}$ C.

The data apply to the entire pack.

8. Exposure controls/personal protection

Specific control parameter

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 $NH_{4}-3$

BAT Germany (biol. tolerance value)

Name Propan-2-ol Parametr Acetone 50 mg/l Values blood Test material test extraction, time

Acetone Parametr 50 mg/l Values Test material urine test extraction, time

TRGS 900

Name Propan-2-ol 200 ml/m^3 Value 500 mg/m^3

Peak limit 4 exceeding factor: 4-fold in 15 minutes

Embryotoxic Substances with which no foetotoxic risk is to be expected

when observing the maximum allowable concentration (MAC Germany) and the biological tolerance value at the workplace

(BAT Germany).

Personal protective equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when vapours/aerosols are generated.

Eye protection: required

Hand protection: In full contact:

> Glove material: nitrile rubber Layer thickness: 0.40 mm Breakthrough time: > 480 Min.

In splash contact:

Glove material: polychloroprene Layer thickness: 0.65 mm Breakthrough time: > 120 Min.

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 730 Camatril® -Velours (full contact), 720 Camapren®

(splash contact).

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Industrial hygiene:

Change contaminated clothing. Application of skin- protective barrier cream recommended. Wash hands after working with substance. Work under hood. Do not inhale substance.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 NH_4-3

9. Physical and chemical properties

Form: liquid Colour: brownish

Odour: characteristic odour

pH value (20 °C) 6-7

Melting point not available
Boiling point not available
Ignition temperature not available
Flash point 22.9 °C
Explosion limits lower not available

upper not available

Density $(20 \,^{\circ}\text{C})$ 0.94 g/cm³

Solubility in

water (20 °C) soluble

10. Stability and reactivity

Conditions to be avoided

Heating.

Substances to be avoided

alkali metals, alkaline earth metals, aluminium in powder form, oxidizing agent (i.a. perchlorates, CrO₃, nitric acid, nitrogen oxides, hydrogen peroxide), organic nitro compounds, aldehydes, amines, fuming sulfuric acid, phosgene.

Hazardous decomposition products

no information available

Further information

Explosible with air in a vaporous/gaseous state.

11. Toxicological information

Acute toxicity

Quantitative data on the toxicity of this product are not available.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 NH_4-3

Further toxicological information

Property that must be anticipated on the basis from the components of the preparation:

After inhalation of vapours/aerosols: drowsiness, drowziness, narcosis.

After skin contact: Slight irritations.

After eye contact: Irritations.

After swallowing: mucosal irritations, nausea, vomiting.

Systemic effects: After absorption of large quantities: tiredness, dizziness, euphoria, inebriation,

agitation, cardiovascular disorders, spasms, narcosis.

Applicable to partial component(s): After swallowing and inhalation: drop in blood pressure, cardiovascular failure, collapse.

Further data

Further hazardous properties cannot be excluded.

The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

Ecotoxic effects:

Quantitative data on the ecological effect of this product are not available.

Biological effects:

Harmfull effect on aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Further ecologic data:

Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

Product:

Chemicals must be disposed of in compliance with the respective national regulations. Under www.retrologistik.de you will find country- and substance-specific information as well as contact partners.

Packaging:

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under www.retrologistik.de you will find special information on the respective national conditions as well as contact partners.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 NH_4-3

14. Transport information

Road & Rail ADR, RID

UN 1824 NATRIUMHYDROXIDLOESUNG, 8, II

Inland waterway ADN, ADNR not tested

Sea IMDG-Code

UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

Ems F-A S-B

Air CAO, PAX

SODIUM HYDROXIDE SOLUTION, 8, UN 1824, II

The transport regulations are cited according to international regulations and in the form applicable in Germany . Possible national deviations in other countries are not considered. THESE TRANSPORT DATA APPLY TO THE ENTIRE PACK!

15. Regulatory information

Labelling according to EC Directives

Symbol: Xn Harmful

R-phrases: 10-22-52/53 Flammable. Harmful if swallowed. Harmful to aquatic

organisms, may cause long-term adverse effects in

the aquatic environment.

S-phrases: ---

contains: Sodium nitroprusside

German regulations

Water pollution class 3 (highly polluting substance) VwVwS Anh. 4

Storage class VCI 3 A

Data sheet of the Chemical Professional Association M004 Irritant substances/corrosive substances

M017 Solvents

M039 Teratogenic effects - protection at working place

Local regulations on chemical

accidents:

The employment restrictions for young workers in accordance with section 22 of the Youth Employment Protection Law (JArbSchG) are to be observed.

The employment restrictions for expectant and nursing mothers in accordance with sections 4 and 5 of the Maternity Protection Guideline (MuSchRiV) are to be observed.

According to EC Directive 91/155/EEC

Catalogue No.: 114752

Product name: Ammonium Test Method: photometric also refill pack for Cat. No. 1.14750.0001

0.010 - 3.00 mg/l NH₄-N 500 Tests 0.013 - 3.86 mg/l NH₄+ Spectroquant®

 NH_4-3

16. Other information

Text of any R phrases referred to under heading 2:

Highly flammable.
Harmful if swallowed.
Toxic if swallowed.
Causes burns.
Irritating to eyes.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

Vapours may cause drowsiness and dizziness.

Reduced labelling on the container due to small quantity.

Reason for alteration

Chapter 14: transport information.

General update.

Contact for information:

HSSE-C/CI * Tel: +49 (0)6151/722775 * Fax: +49 (0)6151/726433 * e-mail:prodsafe@merck.de

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.