

# POCH Safety Data Sheet

According to EC Directive 2001/58/CE. Creation date / last update: 2002-10-15 / 2005-04-06

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

### AMMONIA SOLUTION 25 %

Catalogue Numbers: *pure p. a.-134963118; reag. Ph. Eur.-134964113; specially pure for semiconductors-134963610; specially pure for electronics-134963634; technical-885021993;*

Use of the substance / preparation: *analytical reagent for synthesis*

POCH SA

44-101 Gliwice, Sowinskiego Str. 11

tel.: +48 32 23-92-381; fax: +48 32 23-92-370; e-mail: [export@poch.com.pl](mailto:export@poch.com.pl)

Emergency telephone no: +48 606-659-006

## 2. Hazard identification

*Causes burns. Very toxic to aquatic organisms.*



## 3. Composition/information on ingredients

Synonyms: *ammonium hydroxide solution*

CAS-No.: *1336-21-6*

Molecular mass: *17.03*

Molecular formula: *NH<sub>3</sub>*

WE Number: *215-647-6*

EC-Index No.: *007-001-01-2*

## 4. First aid measures

After eye contact: *rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Call in ophthalmologist.*

After skin contact: *wash off with plenty of water. Dab with polyethylene glycol 400. Take off contaminated clothing.*

After swallowing: *make victim drink plenty of water. Avoid vomiting (risk of perforation). Do not attempt to neutralize. Immediately summon doctor.*

After inhalation: *fresh air. Summon doctor.*

## 5. Fire-fighting measures

Suitable extinguishing media: *water, foam extinguisher*

Special risk: *ambient fire may liberate hazardous vapours. Contain escaping vapours with water. Cool container with water. The following may develop in event of fire: NH<sub>3</sub>.*

Special protective equipment for fire fighting:

Other information: *no further requirements*

Prevent fire-fighting water from entering surface water or groundwater. Cool container with spray water from a safe distance.

Contain escaping vapours with water.

## 6. Accidental release measures

*Do not inhale vapours/aerosols. Take up with liquid- absorbent material. Forward for disposal. Clean up affected area. Render harmless: neutralize with dilute sulfuric acid.*

## AMMONIA SOLUTION 25 %

### 7. Handling and storage

Handling: *Use with adequate ventilation. Use of the basic principles of Industrial Hygiene. Use according to good industry practice. Work under hood. Do not inhale substance. Do not empty into sewerage system. Use protective equipment according to p.8. Avoid skin contact.*

Storage: *tightly closed. Dry well-ventilated place. At +15 to +25 deg C.*

### 8. Exposure controls/personal protection

Specific control parameter: *max. workplace conc.: 14 mg/m<sup>3</sup>, peak limit: 28 mg/m<sup>3</sup> as ammonium.*

*Provide exhaust ventilation. Ensure the eye wash station and safety showers. Protective equipment should be selected for the working place, depending on concentration and quantity of the hazardous product handled. The resistance of the protective clothing to chemicals should be ascertained with respective supplier.*

Personal protective equipment:

respiratory protection: *required when vapours/aerosols are generated - gas mask with specific absorber.*

eye protection: *required - safety goggles.*

hand protection: *required - protective clothing.*

body protection: *required - protective clothing.*

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: *pungent*

pH value: *strong alkaline*

Melting point: *-57,5°C*

Boiling point: *37,7°C*

Ignition temperature: *not applicable*

Flash point: *not applicable*

Explosion limit:

lower: *15,4Vol%*

upper: *33,6Vol%*

dynamic viscosity:

kinematical viscosity:

Vapour pressure: *~ 500 mbar (20°C)*

Density: *0,91 g/cm<sup>3</sup> (20°C)*

Bulk density: *not applicable*

Solubility:

in water: *soluble*

in organic solvents: *not available*

log P(w/o): *-1,38*

## AMMONIA SOLUTION 25 %

### 10. Stability and reactivity

Conditions to be avoided: *no further requirements*

Substances to be avoided: *strong basics (possible of release gas ammonia), iodide, strong acids.*

Hazardous decomposition products: *ammonium*

Other information: *incompatible with metals and metal alloys. Explosible with air in a gaseous state*

### 11. Toxicological information

Toxicological information: *LD50 (oral rat): 350 mg/kg, LCL0 (inhalation human): 5000 ppm (vol.), LC50 (inhalation rat): 1,4 mg/l/44h (as gas).*

Other information: *After inhalation: possible symptoms: coughing, bronchitis, pulmonary oedema. After skin contact: possible effect: irritant and caustic effects (dermatitis, necrosis). After eye contact: burns, risk of blindness! After swallowing: mucosal irritations, gastric pain, nausea, bloody vomiting, collapse, shock, dyspnoea, unconsciousness. Risk of perforation in the oesophagus and stomach. The product should be handled with the care usual when dealing with chemicals.*

### 12. Ecological information

*Log P(w/o): -1,38. No bioaccumulation is to be expected. Toxic for aquatic organisms. Fish toxicity; Onchorhynchus mikiss LC50: 0,53mg/l/96h, Daphnia pulicaria EC50: 1,16 mg/l/48h, Daphnia magna EC50: 24 mg/l/48h. Bacteria: Photobacterium phosphoreum EC50: 2mg/l/5min. May form toxic mixures with water. Harmful effect due to pH shift. For ammonium ions in general: Toxic effect fish from 0,3 mg/l. Do not allow to enter waters, waste water or soil!*

### 13. Disposal considerations

*POCh product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Handle contaminated packing in the same way as the substrate itself. Always contact a permitted waste disposal to assure compliance with all current local, state and federal regulations.*

### 14. Transport information

ADR Class and package group: *8,III*

UN Number: *2672*

Name (acc. to UN): *ammonia solution (10÷35 % of ammonia)*

## AMMONIA SOLUTION 25 %

### 15. Regulatory information

Labelling according to EC Directives.

Symbol: C, N; Corrosive. Dangerous for the Environment.

R-phrases: 34-50; Causes burns. Very toxic to aquatic organisms.

S-phrases: 26-36/37/39-45-61; In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Avoid release to the environment. Refer to special instructions / Safety data sheets. Wear suitable protective clothing, gloves and eye/face protection.

EC label.

### 16. Other information

Reason for alteration: general update.

Informations contained in this SDS while accurate to the best knowledge

