

## Safety Data sheet

According to Directive 1907/2006

### 0029 AMMONIA AQUEOUS, 28% w/w (as NH<sub>3</sub>)

---

Creation Date: 01/12/2010 Revision date: 31/05/2017

---

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

### Identification of the product

Catalogue No: 0029 Product name: AMMONIA AQUEOUS, 28% w/w (as NH<sub>3</sub>) Use of the substance: Analysis and chemical-pharmaceutical production REACH registration Nr.: 01-2119488876-14-0168

### Company/undertaking identification

QUALITY CHEMICALS, SL - C/Fornal 35. Pol. Ind. Can Comelles Sud 08292 ESPARREGUERA ESPAÑA Tel. 937709730 Fax. 937709337 e-mail: dtecnica@qualitychemicals.com

### Emergency telephone No.

Quality Chemicals S.L. Tel. +34 937709730 Only in business hours. Instituto Nacional de Toxicología \*Madrid\* Tel:915620420 Chemtrec: 800-424-9300

---

## 2. Hazards identification

Labelling in accordance with directive 1907/2006



### R-phrases

34 Causes burns.

50 Very toxic to aquatic organisms.

### S-phrases

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where possible)

61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

Labelling in accordance with directive 1272/2008





**H-phrases**

314 Causes severe skin burns and eye damage.  
335 May cause respiratory irritation.  
400 Very toxic to aquatic life.

**P-phrases**

309+311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.  
305+351 If in eyes: Rinse cautiously with water for several minutes.  
338 Remove contact lenses, if present and easy to do. Continue rinsing.  
273 Avoid release to the environment.

Signal word : DANGER

CORROSIVE; DANGEROUS FOR ENVIRONMENT

R-phrases:

Causes burns.  
Very toxic to aquatic organisms.

---

### 3. Composition/information on ingredients

Aqueous solution

**Short hazard description**

AMMONIA, ANHYDROUS (CAS-Nr. 7664-41-7, EINECS-Nr. 231-635-3) 27-31%

R-Phrases: 10; 23; 34; 50

TOXIC; DANGEROUS FOR ENVIRONMENT

For the full text of the R phrases mentioned in this section, see Section 16.

CAS-No.: 1336-21-6

Molecular Weight: 35,05

Chemical formula:  $\text{NH}_4\text{OH}$

EC-Index-No.: 007-001-02-X

EC-No.: 215-647-6

R-phrases 34; 50

For more information about the R-Phrases text you can consult the paragraph 16

---

### 4. First aid measures

**After inhalation:**

Fresh air

If sickness persists, call the physician

After skin contact:

Rinse with abundant water (or have a shower)

Get rid of the contaminated clothes

If sickness persists, call the physician

**After eye contact:**

Rinse with abundant water, keeping eyelids open (at least 10 min)

Call the ophthalmologist

**After swallowing:**

Drink lots of water

Avoid vomiting (perforation risk)

Do not carry out neutralization measures

Call the doctor

---

### 5. Fire-fighting measures

**Suitable extinguishing media:**

Adapt the materials of the surroundings

**Special risks:**

Fireproof

Ambient fire may liberate hazardous vapours

**Special protective equipment for fire fighting:**

Remain in the risk area only if provided with independent artificial respiratory systems.

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

**Other information:**

Precipitate emergent steam with water

Cool the containers with sprayed water

Avoid the penetration of the extinction water in superficial or subterranean aquifers.

---

## 6. Accidental release measures

**Person-related precautionary measures:**

Not to inhale steam/aerosols

**Procedures for cleaning/absorption:**

To gather with absorbents

To come to the elimination of the remainders

Rinse.

**Other information:**

Neutralize with diluted sulfuric acid

**Environmental protection measures:**

Do not send it to the sewerage system

---

## 7. Handling and storage

Handling: Without other exigencies

**Storage:**

Well closed

In well-ventilated place

Storage temperature: ambient

---

## 8. Exposure controls/personal protection

Exposure limit control

AMMONIA, ANHYDROUS

TLV-TWA: 25 ppm; TLV-STEL: 35 ppm

**Personal protective equipment:**

**Respiratory protection:**

Necessary when steam/aerosols are generated

**Hand protection:**

Protection gloves:

Nitrile rubber

**Eye protection:**

Needed

**Skin and body protection:**

Suitable protective clothing

**Other protective equipment:**

Change immediately contaminated clothes  
Recommendable preventive protection of the skin  
Wash hands and face when the work is finished  
Fulfill the commitments under local environmental protection legislation

---

## 9. Physical and chemical properties

Physical state: Liquid  
Colour: Colourless  
Odour: Characteristic  
pH value: >13  
Vapour pressure: 500 hPa (20°C)  
Density (g/cm<sup>3</sup>): 0,910  
Solubility: Soluble in water  
log P(ow): -1.38

---

## 10. Stability and reactivity

**Substances to be avoided:**

Iodine  
Alkaline salts.  
Metal and metal alloys.  
Strong acids.

**Hazardous decomposition products:**

Ammonia.

**Further information:**

Explosible with air in a vaporous/gaseous state.

---

## 11. Toxicological information

**Acute toxicity:**

CL50 (inhalation, rat): 1.4 mg/l/4h (anhydrous substance); DL50 (oral, rat): 350 mg/kg (29% solution)

**After eye contact:**

Burns  
Risk of blindness

**After skin contact:**

Burns  
Necrosis

**After inhalation:**

Coughing  
Pulmonary oedema  
Bronchitis

**After long contact:**

Loss of consciousness  
Dyspnoea  
Nausea  
Collapse

**After swallowing:**

Irritations of mucous membranes in the mouth  
Stomach pains  
Bloody vomiting  
Risk of perforation in stomach

Risk of perforation in the oesophagus

**Further toxicological information:**

Take the usual precautions for handling chemical products

---

## 12. Ecological information

Fishes: Onchorhynchus mykiss LC50: 0.53 mg/l/96h (anhydrous substance)

Daphnia: Daphnia magna EC50: 24 mg/l/478h (anhydrous substance)

Bacteria: Photobacterium phosphoreum EC50: 2 mg/l/5 min (anhydrous substance)

Log P(ow): -1.38

Biodegradability: Middle

Bioaccumulation: Bioaccumulation is not expected

**Other harmful effects:**

Highly toxic for aquatic organisms

Harmful effect due to pH shift

Forms toxic mixtures in water, dilution measures not with standing

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

---

## 13. Disposal considerations

**Product:**

Dispose as regulated in the community countries by local regulations.

Please contact with the suitable authority in each case (Public Administration or company specialized in

**Packaging:**

Product packaging disposal must be disposed of in compliance with the respective local regulations.

For contaminated packaging the same measures must be adopted as for the contaminated product.

Not contaminated packaging must be disposed of as domestic residues or recycled material.

European Directive 94/62/EC of 20 December 1994 on packaging and packaging waste

---

## 14. Transport information

### Overland transport ADR/RID

UN: 2672

Class: 8

Packaging group: III

Correct technical name: AMMONIA SOLUTION

### Sea transport IMDG

UN: 2672

Class: 8/III

Packaging group: III

Correct technical name: AMMONIA SOLUTION

### Air transport ICAO-IATA-DGR

UN: 2672

Class: 8

Packaging group: III

Correct technical name: AMMONIA SOLUTION

CAO: 856

PAX: 852

---

## 15.Regulatory information

---

## 16.Other information

Full text of R phrases mentioned in sections 2 and 3

10 Flammable.

23 Toxic by inhalation.

34 Causes burns.

50 Very toxic to aquatic organisms.

The information contained herein is based on the present state of our knowledge.

It characterizes the product with regard to appropriate safety precautions. It does not represent a guaranty of the properties of the product.