

25% Ammonia Solution

Safety Data Sheet



(EC) No. According to Regulation 1907/2006 (REACH) and its amendment Regulation (EU) 2020/878 and published in the Official Gazette No. 30105 dated 23 June 2017, Registration, Evaluation, Authorization and Control of Chemicals

It has been prepared in accordance with the Regulation on Restrictions.

Date of publication: 4.21.2003 Revision date: 08.08.2024

Version: 4.0

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

1.1. Product identifier

Trade name : 25% Ammonia Solution

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Defined Appropriate Uses

Industrial use.

1.2.2 Recommended Uses

No descriptive information

1.3. Details of the supplier of the safety data sheet

Gemlik Gübre Sanayii A.Ş.

Ata Mahallesi Sanayi Caddesi No:6

Bursa - Türkiye

T +902245190070

info@gemlikgubre.com.tr - <http://www.gemlikgubre.com.tr>

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Turkey	Ulusal Zehir Merkezi (UZEM) Refik Saydam Hıfızsihha Merkezi Başkanlığı	Cemal Gürsel Cd. No: 18 Sıhhiye Çankaya 06590 Ankara	114	Information is provided to public and medical personnel on poisoning incidents via 114.
Turkey	Gemlik GübreSanayi A.Ş.	Ata Mahallesi Sanayi Caddesi No:6 Bursa - Türkiye	+902245190070	In Working Hours (08: 00-18: 00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the an Regulation on the Classification, Labeling and Packaging of Substances and Mixtures et (SEA) and EC No 1272/2008 CLP, published on 11 December 2013 and 28848 Republied Official Gazette.

Acute toxicity (inhalation:vapour) Category 4 H332

Skin corrosion/irritation, Category 1B H314

Hazardous to the aquatic environment — Acute Hazard, Category 1 H400

Full text of H-statements: see section 16

2.2. Label elements

Labeling in accordance with the “Regulation on the Classification, Labeling and Packaging of Substances and Mixtures et (SEA) and EC No 1272/2008 CLP published on 11 December 2013 and 28848 Republied Official Gazette

Hazard pictograms (SEA)



Signal word (SEA)

: Danger

Hazardous ingredients

: ammonia, anhydrous

Hazard statements (SEA)

: H314 - Causes severe skin burns and eye damage.
H332 - Harmful if inhaled.
H400 - Very toxic to aquatic life.

Precautionary statements (SEA)

: P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face with soap and water thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately dial 114 for the NATIONAL POISON CENTER or call a doctor/physician
P312 - If you feel unwell, dial 114 for the NATIONAL POISON CENTER or call a doctor/physician
P321 - Specific treatment necessary (see label)
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P405 - Store locked up.

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P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

Other hazards not contributing to the classification

Adverse physicochemical, human health and environmental effects : Harmful if inhaled. Causes severe skin burns and eye damage. Very toxic to aquatic life.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Classification, Labelling and Packaging of Substances and Mixtures (SEA) Regulation published in the Official Journal numbered 28848 on December 11, 2013.
AQUA	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	75	Not classified
ammonia, anhydrous (Note U)	(CAS-No.) 7664-41-7 (EC-No.) 231-635-3 (EC Index-No.) 007-001-00-5 (Reach No) 01-2119490981-27-XXXX	25	Flam. Gas 2, H221 Press. Gas Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Aquatic Acute 1, H400

Note U (Table 3): When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Immediately remove the patient from the source and remove to fresh air. Keep it warm and calm. If breathing is difficult, give respiratory support or connect to breathing apparatus. If breathing is not possible, artificial respiration is required by a competent person. If the patient is unconscious, move or tilt sideways. Call a doctor immediately.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a doctor immediately. Wash affected area immediately with plenty of water.
First-aid measures after eye contact	: Flush eyes with eyelids, eye wash solution (5% boric acid solution) or plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to remove. Continue washing until medical attention is obtained. Call a doctor immediately.
First-aid measures after ingestion	: DO NOT ALLOW VOMITING. If the patient is conscious, rinse her mouth with water and drink 2 or 3 glasses of water. Do not give anything by mouth to the unconscious patient. Get immediate medical attention / call the doctor.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

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5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : When burning, gases and fumes may form nitrogen oxides.
If the combustion is not completed, carbon monoxide may form.
May cause explosion by the effect of the heat of the container where the material is closed during combustion.
If the ammonia and air mixture in an enclosed area are within the limits (16-27%), igniting may cause explosion.

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Evacuate the spread area if it can be safely done.
If it is not, stop all electrical appliances remaining in the enclosed space, which may cause an electrical arc.
Use personal protective equipment. Ensure that the environment is well ventilated.
Do not smoke.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. In case of contamination by sewerage / surface water / groundwater, inform the authorities. . In case of accidental contamination of water channels, inform the authorities. Fan the media during the cleaning process.

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
In order to prevent ingestion and contact with the skin during the use of chemicals, industrial hygiene standards must be complied with. Common rules must be followed in handling chemicals. Ensure good ventilation at work. Use personal protective equipment if there is a risk of rash or leakage. Keep away from open flames and other sources of ignition.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.
Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Cold, dry, well ventilated. The storage temperature is between 10 and 25 ° C. In well sealed containers, protect from heat, water and direct sunlight. Containers made of stainless steel, polyethylene, propylene or mild steel. Protect containers from physical damage.
Smoking, eating and drinking should be prohibited in the warehouse. Separate storage from flammable substances, aerosols, oxidizing agents, corrosive / corrosive substances, products classified from human health and irritants and / or pests / toxicities.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Gas mask. Safety glasses. Gloves. Protective clothing.
Hand protection	: Chemical protective gloves In the selection of gloves, it is sufficient to take into account the resistance to perforations, permeability rates and distortions. The gloves must be disposed of on disposal. Cold insulating PVC gloves. Select gloves according to EU directive 89/686 / EEC and EN 374
Eye protection	: Chemical protective goggles or face shield Wear suitable protective clothing. Use face-protection goggles where there is a high risk of Splash and where there is a direct exposure risk of vapour. Use eye protection in accordance with NIOSH and en 166 standards.
Skin and body protection	: Use chemical protective clothing and footwear. Wear waterproof chemical resistant protective gloves and approved approved protective clothing, aprons, visors and tools, rubber or plastic boots.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Use respiratory protection with approved filter: filter type half mask for dust and semi-gas mask and filter for decomposition gases. For risk assessments, use a full face shielded breathing apparatus with ABEK (EN14387) type cartridge where the air cleaner system is insufficient. Use EN141 type masks even where the air cleaner system is sufficient. Ensure that the breathing apparatus and ventilation systems are approved by organizations such as NIOSH (USA) and CEN (EU). According to personal protection practices in Germany, it is suitable for the ZH-1/134 respiratory catalog.



Environmental exposure controls	: Avoid release to the environment.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: 0.02 - 70.7 ppm
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -57.5 °C
Freezing point	: No data available
Boiling point	: 37 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 483 hPa
Relative vapour density at 20 °C	: No data available
Relative density	: 0.903 - 0.91 g/cm ³
Solubility	: Soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: It is not classified as explosive.
Oxidising properties	: May intensify fire; oxidiser.

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Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under normal use, storage and transportation conditions. The heating will cause the liquid to evaporate.

10.2. Chemical stability

Stable under normal conditions. Avoid heat and physical damage to containers and containers.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Forms nitrogen oxides (NOx) in the flame reaction.

10.4. Conditions to avoid

Not available under recommended storage and handling conditions (see section 7). Corrosion of copper, zinc, aluminum, cadmium and its alloys. Reacts violently with strong acids.

10.5. Incompatible materials

Incompatible materials: Avoid contact with acids, oxidizing agents, halogens, silver compounds, dimethyl sulphate, carbon dioxide, phosphorus oxides, oxygen, sulfur dioxide, zinc, copper, tin.

10.6. Hazardous decomposition products

It creates harmful decomposition products in high temperature and fire environment. (Nitrogen oxides NOx)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation:vapour: Harmful if inhaled.

Skin corrosion/irritation : Causes severe skin burns.

Serious eye damage/irritation : Causes serious eye damage ..

Respiratory or skin sensitisation : Harmful if inhaled.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life.

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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Bioaccumulative potential	No additional information available

12.4. Mobility in soil

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Mobility in soil	No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

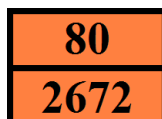
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
2672	2672	2672	2672	2672
14.2. UN proper shipping name				
AMMONIA SOLUTION	AMMONIA SOLUTION	Ammonia solution	AMMONIA SOLUTION	AMMONIA SOLUTION
Transport document description				
UN 2672 AMMONIA SOLUTION, 8, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 2672 AMMONIA SOLUTION, 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 2672 Ammonia solution, 8, III, ENVIRONMENTALLY HAZARDOUS	UN 2672 AMMONIA SOLUTION, 8, III, ENVIRONMENTALLY HAZARDOUS	UN 2672 AMMONIA SOLUTION, 8, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : C5
Special provisions (ADR) : 543
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP1
Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Hazard identification number (Kemler No.) : 80
Orange plates :



Tunnel restriction code (ADR) : E

- Transport by sea

Packing instructions (IMDG) : P001, LP01
IBC packing instructions (IMDG) : IBC03

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IBC special provisions (IMDG)	: B11
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2, SW5
Segregation (IMDG)	: SG35
Properties and observations (IMDG)	: Colourless liquid with a pungent odour. Corrosive to copper, nickel, zinc and tin and their alloys such as brass. Not significantly corrosive to iron and steel. Reacts violently with acids. Liquid and vapour cause burns to skin, eyes and mucous membranes.

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A64
ERG code (IATA)	: 8L

- Inland waterway transport

Classification code (ADN)	: C5
Special provisions (ADN)	: 543
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0

- Rail transport

Classification code (RID)	: C5
Special provisions (RID)	: 543
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. National regulations

This product doesn't contain any substances that is controlled or prohibited for use according to the Regulation for Reduction of Ozone Depleting Substances published in the Official Journal numbered 27052 on November 12, 2008.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

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15.3. Additional information

For the implementation of the provisions in this safety data sheet, see the following regulations for legislation or other national measures that may be relevant.

- Regulation on the Preparation and Distribution of Safety Data Sheets for Hazardous Substances and Mixtures
- Regulation on Classification, Labeling and Packaging of Hazardous Substances and Mixtures
- Regulation on Restrictions on the Production, Market Supply and Use of Certain Hazardous Substances, Preparations and Goods
- Occupational Health and Safety Law
- Regulation on Health and Safety Measures in Carcinogenic and Mutagenic Substances
- Regulation on Health and Safety Measures in Working with Chemical Substances
- Regulation on the Use of Personal Protective Equipment at Workplaces
- Waste Management Regulation

SECTION 16: Other information

Full text of H-statements

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Flam. Gas 2	Flammable gases, Category 2
Press. Gas	Gases under pressure
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H221	Flammable gas.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.

Other information

: This document has been prepared and approved by Gemlik Gübre Sanayii A.Ş. and certified by MAVİ YEŞİL DANIŞMANLIK accredited experts who are certified by the Regulation on Safety Data Sheets on Hazardous Substances and Mixtures, dated December 13, 2014 and numbered 29204 .

Expert: Beyza SEVİM

Expert Accreditation No: NBC04.69.01&26.03.2024

Effective Date: 26.03.2029

Validity Period: 5 YEARS.

Key information sources used in the arrangement of this safety data sheet;

- Safety data sheet / form prepared by the manufacturer for the product
- "Regulation on Safety Data Sheets for Hazardous Substances and Mixtures" and its annexes,
- "Regulation on the Classification, Labeling and Packing of Materials and Mixtures" and its annexes
- "Regulation on Health and Safety Precautions for Carcinogenic and Mutagenic Work" and its annexes,
- Other relevant local regulations
- ADR, AND, RID, IMDG, IATA lists, ECHA and related EU directives,

The information provided in this Safety Data Sheet is based on our current best practices, knowledge and beliefs as of the date of preparation. The information provided is designed to be a guide for safe handling, handling, handling, storage, transport, disposal and disposal. This information applies only to the specified substance / mixture, unless otherwise specified in the documentation, and may not apply if this substance is used in combination with other substances or if any other procedure is used. Please observe the information in the Safety Data Sheet for use. This information is based on our current knowledge. This Safety Data Sheet defines the product according to the appropriate safety regulations, but does not guarantee the safety of the product. It does not constitute a guarantee and the product specifications do not establish a legally valid contractual relationship.

SDS Turkey

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product