

19% Aqua Ammonia

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name 19% Aqua Ammonia
Unique Formula Identifier (UFI) N/A

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

Identified Use(s) Industrial use: Chemical has an application for reducing NO_x from Flue gases i.e. as De-NO_x reducing agent.

Uses Advised Against None known.

1.3 Details of the supplier of the safety data sheet

Company Identification Qatar Fertiliser Company
Address P.O. Box 50001
Mesaieed, Qatar
Telephone (+974) 44228888
Fax (+974) 44770347
E-mail aawad@gafco.com.qa
Only representative of a non-Community manufacturer
Company Identification QatarEnergy Marketing B.V.
Address Prinses Margrietplantsoen 88
2595 BR, La Haye
Pays Bas

E-mail REACH@qatarenergy.qa
Website www.qatarenergy.qa

1.4 Emergency telephone number

National Poisons Information Service (Birmingham Centre) +44 111
For Spill, Leak, Fire, Exposure or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970 and +1-703-527-3887 (collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP) Skin Corr. 1B :Causes severe skin burns and eye damage.
Eye Dam. 1 :Causes serious eye damage.
Acute Tox. 4 :Harmful if inhaled.
STOT SE 3 :May cause respiratory irritation.
Aquatic Acute 1 :Very toxic to aquatic life.
Aquatic Chronic 2 :Toxic to aquatic life with long lasting effects.

2.2 Label elements

Product Name According to Regulation (EC) No. 1272/2008 (CLP)
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Hazard Pictogram(s)



GHS05

GHS07

GHS09

Signal Word(s) Danger

Hazard Statement(s) H314: Causes severe skin burns and eye damage.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H410: Very toxic to aquatic life with long lasting effects.
EUH071: Corrosive to the respiratory tract.

Precautionary Statement(s)

P260: Do not breathe vapour.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331+P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor.
P303+P361+P353+P310: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTRE/doctor.
P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several

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minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTRE/doctor.
N/A

Unique Formula Identifier (UFI)

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Water	7732-18-5	231-791-2	75-85	Not classified	None
Ammonia, anhydrous	7664-41-7	231-635-3 01-211948876-14-XXXX	15-25	Skin Corr. 1B H314 Acute Tox. 4 H332 Aquatic Acute 1 H400 Aquatic Chronic 2 H411	GHS05 GHS07 GHS09

HAZARDOUS INGREDIENT(S)	CAS No.	Specific Concentration Limit	M-factor	ATE
Ammonia, anhydrous	7664-41-7	STOT SE 3 C>= 5.00 <= 100.00		Acute Tox. 4 (H332): 4500

Contains no non-classified vPvB substances or substances with a Union workplace exposure limit.
For full text of H/P Statements see section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.
Skin Contact Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTRE/doctor.
Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor.
Ingestion Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. Harmful if swallowed. May cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media As appropriate for surrounding fire. Water spray, dry powder or carbon dioxide. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable extinguishing media Water jet spray

5.2 Special hazards arising from the substance or mixture

Decomposes in a fire giving off toxic fumes: Nitrogen oxides, Ammonia

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Dike fire control water for later disposal.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe vapour. Wear appropriate personal protective equipment, avoid direct contact. Wash hands and exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Use neutralising agent/Dilute with water. Adsorb spillages onto sand, earth or any suitable adsorbent material. Collect spillage. Transfer to a container for disposal. Flush spill area with copious amounts of water.

6.4 Reference to other sections

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See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation. Do not breathe vapour. Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke at the work place.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed, in a cool, well ventilated place. Keep only in original container. Store locked up.

Storage temperature
Storage life
Incompatible materials

Ambient.
Stable under normal conditions.
Strong oxidising agents, Reducing agent, Wide variety of metals (Copper, Brass, Aluminium and zinc alloy), Alkalis, Acrolein, Mineral acids, Dimethylsulphate, Mercury, Chlorine, Silver.

7.3 Specific end use(s)

Industrial use: Chemical has an application for reducing NO_x from Flue gases i.e. as De-NO_x reducing agent.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTTEL (8 hr TWA ppm)	LTTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Ammonia, anhydrous	7664-41-7	25	18	35	25	

Region Source
United Kingdom UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment



Eye Protection

Wear goggles giving complete eye protection.



Skin protection

Wear protective clothing and gloves: Impervious gloves.
Type: Butyl rubber, BR Fluorocarbon rubber (Viton). Permeation time: Level ≥ 8h.
Breakthrough time of the glove material: refer to the information provided by the gloves' producer.



Respiratory protection

Wear suitable respiratory protection.



Thermal hazards

Not applicable.

8.2.3. Environmental Exposure Controls Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless.
Odour	Pungent.
Melting point/freezing point	~-30°C
Boiling point or initial boiling point and boiling range	52.3°C
Flammability	Non-flammable.
Lower and upper explosion limit	Flammable Limits (Lower) (%v/v) : 15 Flammable Limits (Upper) (%v/v) : 30.2
Flash Point	Not available.
Auto-ignition temperature	630°C

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Decomposition Temperature	Not available.
pH	>13
Kinematic Viscosity	Not available.
Solubility	Solubility (Water) : Completely miscible with water. Solubility (Other) : Not known.
Partition coefficient n-octanol/water (log value)	Log Pow : 0.23 (Ammonia)
Vapour pressure	23 hPa @ 20°C
Density and/or relative density	Not available.
Relative vapour density	Not available.
Particle characteristics	Not applicable.
9.2 Other information	
Odour threshold	~5 ppm

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	None anticipated.
10.2 Chemical Stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	No hazardous reactions known if used for its intended purpose.
10.4 Conditions to avoid	Heat and direct sunlight.
10.5 Incompatible materials	Strong oxidising agents, Reducing agent, Wide variety of metals (Copper, Brass, Aluminium and zinc alloy), Alkalis, Acrolein, Mineral acids, Dimethylsulphate, Mercury, Chlorine, Silver.
10.6 Hazardous decomposition products	No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
Acute toxicity - Ingestion	Calculation method : Not classified.
Acute toxicity - Skin Contact	Calculation method : Not classified.
Acute toxicity - Inhalation	Calculation method : Harmful if inhaled. Calculated acute toxicity estimate (ATE): 13140 Ammonia, aqueous: LC50 (4h): 3285 ppm
Skin corrosion/irritation	Calculation method : Causes severe skin burns and eye damage. The visible signs of skin pathology appeared only at an ammonia concentration of 20-30 mg/L and higher, mainly in the form of a burn around the anus and in the region of the external genitalia.
Serious eye damage/irritation	Calculation method : Causes serious eye damage. No data. Additional testing for eye irritation/corrosion is not required and is considered to be unjustified both scientifically and on animal welfare grounds.
Skin sensitization data	Calculation method : Not classified. It is not a skin sensitizer.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified. There is no evidence of mutagenic potential.
Carcinogenicity	Calculation method : Not classified. No evidence of carcinogenicity.
Reproductive toxicity	Calculation method : Not classified. No evidence of reproductive effects.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : May cause respiratory irritation. No data.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Calculation method : Not classified.
11.2 Information on other hazards	Corrosive to the respiratory tract.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	
Toxicity - Aquatic invertebrates	Very toxic to aquatic life with long lasting effects. No data.
Toxicity - Fish	Acute: LC50: 0.083 mg/l Chronic: NOEC: 0.0135 mg/l
Toxicity - Algae	No data.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.
12.2 Persistence and degradability	

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12.3 Bioaccumulative potential	The product is biodegradable. Unlikely to persist.
	The product has low potential for bioaccumulation.
12.4 Mobility in soil	Miscible with water. The product is predicted to have high mobility in soil.
12.5 Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6 Endocrine disrupting properties	None known.
12.7 Other adverse effects	Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

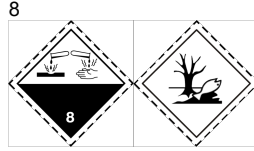
13.1 Waste treatment methods	Dispose of this material and its container as hazardous waste. Dispose of empty containers and wastes safely.
13.2 Additional Information	Disposal should be in accordance with local, state or national legislation.
Waste code	06 02 03* ammonium hydroxide

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number	2672
UN No.	2672
14.2 UN proper shipping name	AMMONIA SOLUTION
UN proper shipping name	AMMONIA SOLUTION
14.3 Transport hazard class(es)	
ADR/RID	
ADR/RID Class	8
ADR Classification Code	C5
Special Provisions	543
Limited Quantities	5 L
Excepted Quantities	E1
Emergency Action Code	2X
Packing Instructions for Packages	P001 IBC03 LP01 R001
Mixed Packing Instructions for Packages	MP19
Instructions for Portable Tanks	T7
Special Provisions for Portable Tanks	TP1
Tank Code for Tanks	L4BN
Vehicle for Tank Carriage	AT
ADR Transport Category	3
Tunnel Restriction Code	E
Special Provisions for Carriage - Packages	V12
ADR HIN	80
IMDG	
IMDG Class	8
Limited Quantities	5 L
Excepted Quantities	E1
Mixed Packing Instructions for Packages	P001 LP01 IBC03
Special Packing Provisions for Packages	B11
Instructions for Portable Tanks	T7
Special Provisions for Portable Tanks	TP1
IMDG EMS	F-A, S-B
Stowage and Handling	Category A SW2 SW5
Segregation	SGG18 SG35
Marine Pollutant	P
ICAO/IATA	
IATA Proper Shipping Name	AMMONIA SOLUTION
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y841
Passenger and Cargo Aircraft Limited Quantities Max net Qty	1L
Passenger and Cargo Aircraft Packing Instructions	852
Passenger and Cargo Aircraft Max net Qty	5 L
Cargo Aircraft Packing Instructions	856
Cargo Aircraft Max net Qty	60 L
Special Provisions	A64, A803
Emergency Response Guidebook (ERG)	8 L

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Code
Labels
Labels



14.4 Packing group

Packing group

III

14.5 Environmental hazards

Environmental hazards

Classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user

Not known.

14.7 Maritime transport in bulk according to IMO instruments

Special precautions for user

No information available

SECTION 15: REGULATORY INFORMATION

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

REACH: ANNEX XIV list of substances subject to authorisation Not listed

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Ammonia, anhydrous (7664-41-7)

Community Rolling Action Plan (CoRAP) Not listed

Regulation (EU) N° 2019/1021 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals Not listed

National regulations
Other Not known.

15.2 Chemical Safety Assessment

Other

Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

1-16

LEGEND

Hazard Pictogram(s)



GHS05



GHS07



GHS09

Hazard classification

Skin Corr. 1B : Skin corrosion/irritation, Category 1B
 Eye Dam. 1 : Serious eye damage/irritation, Category 1
 Acute Tox. 4 : Acute toxicity, Category 4
 STOT SE 3 : Specific target organ toxicity — single exposure, Category 3
 Aquatic Acute 1 : Hazardous to the aquatic environment, Acute, Category 1
 Aquatic Chronic 1 : Hazardous to the aquatic environment, Chronic, Category 1

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Aquatic Chronic 2 : Hazardous to the aquatic environment, Chronic, Category 2

Hazard Statement(s)	<p>H314: Causes severe skin burns and eye damage. H318: Causes serious eye damage. H332: Harmful if inhaled. H335: May cause respiratory irritation. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects. H411: Toxic to aquatic life with long lasting effects. EUH071: Corrosive to the respiratory tract.</p>
Precautionary Statement(s)	<p>P260: Do not breathe vapour. P261: Avoid breathing vapours. P264: Wash hands and exposed skin 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+P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor. P303+P361+P353+P310: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTRE/doctor. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor. P312: Call a POISON CENTRE/doctor if you feel unwell. P321: Specific treatment (see Medical Advice on this label). P363: Wash contaminated clothing before reuse. P391: Collect spillage. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P405: Store locked up. P501: Dispose of contents in accordance with local, state or national legislation.</p>
Acronyms	<p>ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road ATE : Acute Toxicity Estimate CAS : Chemical Abstracts Service CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures EC : European Community IATA : International Air Transport Association IBC : Intermediate Bulk Container ICAO : International Civil Aviation Organization IMDG : International Maritime Dangerous Goods LTEL : Long term exposure limit PBT : Persistent, Bioaccumulative and Toxic REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals RID : Regulations concerning the International Carriage of Dangerous Goods by Rail STEL : Short term exposure limit STOT : Specific Target Organ Toxicity UN : United Nations vPvB : very Persistent and very Bioaccumulative</p>
Key literature references and sources for data used to compile the SDS	<p>Regulation (EC) No. 1272/2008 (CLP)</p>
Training Advice	<p>Regular safety training as appropriate</p>
Disclaimers	<p>Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Qatar Fertiliser Company gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Qatar Fertiliser Company accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.</p>