

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : AMMONIAQUE / AMMONIAK

Product code : 0601054F.

UFI : FQ0R-V6ED-7K5A-13SG

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

Household maintenance product.

1.3. Details of the supplier of the safety data sheet

Registered company name : FOREVER PRODUCTS N.V..

Address : 122 rue de la Glacerie.6180.COURCELLES.Belgique.

Telephone : 071/46.85.15. Fax : 071/46.85.69.

chulin@forever-products.be

www.forever-products.be

Contactpersoon, personne à cont.: Christelle Hulin

1.4. Emergency telephone number : 070 245 245.

Association/Organisation : Antigifcentrum België, centre anti-poison.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin corrosion, Category 1B (Skin Corr. 1B, H314).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05

Signal Word :

DANGER

Product identifiers :

EC 215-647-6 AMMONIA SOLUTION 12.0%

Hazard statements :

H314 Causes severe skin burns and eye damage.

Precautionary statements - General :

P102 Keep out of reach of children.

Precautionary statements - Prevention :

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/
...

Precautionary statements - Response :

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
[or shower].

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.

Precautionary statements - Disposal :

P501 To eliminate the contents/container in accordance with the regulation
local/regional/national/international.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances $\geq 0.1\%$ with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures****Composition :**

Identification	(EC) 1272/2008	Note	%
CAS: 1336-21-6	GHS05, GHS07	B	10 $\leq$ x % < 25
EC: 215-647-6	Dgr		
REACH: 01-2119982985-14	Skin Corr. 1B, H314		
	STOT SE 3, H335		
AMMONIA SOLUTION			

Information on ingredients :

(Full text of H-phrases: see section 16)

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

Never give anything by mouth to an unconscious person.

4.1. description of first aid measures**In the event of exposure by inhalation :**

To consult a doctor by showing him the label of the product.

In the event of splashes or contact with eyes :

Wash with plenty of clean, fresh water for several minutes.

If irritation persists, consult a Ophthalmology.

In the event of splashes or contact with skin :

Remove soaked clothing and cleanse skin with soap and water.

To consult a doctor by showing him the label of the product.

In the event of swallowing :

Do not give the patient anything orally.

Seek medical attention immediately, showing the label.

Rinse mouth with water.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Use extinguishing measures appropriate to local circumstances and the surrounding environment.

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- BC powder
- carbon dioxide (CO₂)

5.2. Special hazards arising from the substance or mixture

An incomplete combustion can cause the formation of toxic products of pyrolysis.

5.3. Advice for firefighters

Due to the toxicity of gases evolved during thermal decomposition products, are to be equipped with self-contained breathing apparatus.

Cool containers / holding tank with water spray.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

Report spills to appropriate authorities in accordance with the regulations.

6.3. Methods and material for containment and cleaning up

Collect liquid with absorbent material sand, diatomite, binders, universal binders, sawdust, ...

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Not to breathe the vapors.

Fire prevention :

Handle in well-ventilated areas.

Recommended equipment and procedures :

For personal protection, see section 8.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Ground of storage resistant to alkalis.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

According to our supplier:

VME (substance, long run): 20 ppm/14 mg/m³

VME (substance, short term): 50 ppm/36 mg/m³

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

AMMONIA SOLUTION ...% (CAS: 1336-21-6)

Final use:

Exposure method:

Potential health effects:

DNEL :

Workers.

Dermal contact.

Long term systemic effects.

68 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Dermal contact.

Short term systemic effects.

68 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term systemic effects.

47.6 mg of substance/m³

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Short term systemic effects.

47.6 mg of substance/m³

Exposure method:

Inhalation.

Potential health effects:
DNEL : Long term local effects.
14 mg of substance/m3

Exposure method:
Potential health effects:
DNEL : Inhalation.
Short term local effects.
36 mg of substance/m3

Final use:
Exposure method:
Potential health effects:
DNEL : **Consumers.**
Ingestion.
Long term systemic effects.
6.8 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL : Ingestion.
Short term local effects.
6.8 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL : Dermal contact.
Long term systemic effects.
68 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL : Dermal contact.
Short term systemic effects.
68 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL : Inhalation.
Long term systemic effects.
23.8 mg of substance/m3

Exposure method:
Potential health effects:
DNEL : Inhalation.
Short term systemic effects.
23.8 mg of substance/m3

Exposure method:
Potential health effects:
DNEL : Inhalation.
Long term local effects.
2.8 mg of substance/m3

Exposure method:
Potential health effects:
DNEL : Inhalation.
Short term local effects.
7.2 mg of substance/m3

Predicted no effect concentration (PNEC):

AMMONIA SOLUTION ...% (CAS: 1336-21-6)

Environmental compartment:
PNEC : Fresh water.
0.0011 mg/l

Environmental compartment:
PNEC : Sea water.
0.0011 mg/l

Environmental compartment:
PNEC : Intermittent waste water.
0.0068 mg/kg

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

- Eye / face protection

Before handling, wear safety goggles with protective sides accordance with standard EN166.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)
- fluorinated rubber

- Body protection

Wear suitable protective clothing.

- Respiratory protection

In case of brief exposure, use a filter respirator use, in case of prolonged exposure, use a breathing apparatus independent of the ambient air.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state :	Fluid liquid.
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Colour

Unspecified

Odour

Odour threshold :	Not stated.
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Melting point

Melting point/melting range :	Not specified.
Point/interval of fusion:	< 0°C

Freezing point

Freezing point / Freezing range :	Not stated.
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Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not specified.
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Flammability

Flammability (solid, gas) :	Not stated.
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Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	15
Explosive properties, upper explosivity limit (%) :	28

Flash point

Flash point interval :	Not relevant.
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Auto-ignition temperature

Self-ignition temperature :	630 °C.
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Decomposition temperature

Decomposition point/decomposition range :	Not specified.
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pH

pH :	Not stated.
	Strongly basic.
pH (aqueous solution) :	env.12

Kinematic viscosity

Viscosity :	Not stated.
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Solubility

Water solubility :	Soluble.
Fat solubility :	Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water :	Not stated.
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Vapour pressure

Vapour pressure (50°C) :	Above 300 kPa (3 bar).
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Density and/or relative density

Density :	0.91 +/- 0.01
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Relative vapour density

Vapour density :	Not stated.
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9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

See the sections below.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

Exothermic reactions with strong acids.

Corrosive reaction in contact with metals.

10.4. Conditions to avoid

Avoid :

- heat

10.5. Incompatible materials

Keep away from :

- acids

- Aluminium

- metals

- zinc

10.6. Hazardous decomposition products

No data available.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

11.1.1. Substances

Skin corrosion/skin irritation :

AMMONIA SOLUTION ...% (CAS: 1336-21-6)

Corrosivity :

Causes severe skin burns.

Species : Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious damage to eyes/eye irritation :

Irritating for the eyes.

Respiratory or skin sensitisation :

Not classified sensitizing.

Germ cell mutagenicity :

AMMONIA SOLUTION ...% (CAS: 1336-21-6)

No mutagenic effect.

Mutagenesis (in vivo) :

Negative.

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro) :

Negative.

Carcinogenicity :

AMMONIA SOLUTION ...% (CAS: 1336-21-6)

Carcinogenicity Test :

Negative.

No carcinogenic effect.

Species : Rat

OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicant :

AMMONIA SOLUTION ...% (CAS: 1336-21-6)

No toxic effect for reproduction

Study on development :

Species : Rat

OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

11.1.2. Mixture

No toxicological data available for the mixture.

11.2. Information on other hazards

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

CL50 (substance, oncorhynchus mykiss, 96h) = 0.53 mg/l

CE50 (substance, daphnia magna, 48h) = 24 mg/l

AMMONIA SOLUTION ...% (CAS: 1336-21-6)

Crustacean toxicity :

EC50 = 101 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

Algae toxicity :

ECr50 = 2700 mg/l

Species : Chlorella vulgaris

Duration of exposure : 72 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

Readily biodegradable.

12.2.1. Substances

AMMONIA SOLUTION ...% (CAS: 1336-21-6)

Biodegradability :

Rapidly degradable.

12.3. Bioaccumulative potential

No possible bio-accumulation.

12.4. Mobility in soil

Mobile product in water.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

Harmful effects on the watery organizations by displacement of the value of the pH.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 2 : Hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.
Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2021 - IMDG 2020 [40-20] - ICAO/IATA 2022 [63]).

14.1. UN number or ID number

2672

14.2. UN proper shipping name

UN2672=AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15 °C in water, with more than 10% but not more than 35% ammonia

14.3. Transport hazard class(es)

- Classification :



8

14.4. Packing group

III

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C5	III	8	80	5 L	543	E1	3	E
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation	
	8	P	III	5 L	F-A. S-B	-	E1	Category A SW2 SW5	SGG18 SG35	
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	8	-	III	852	5 L	856	60 L	A64 A803	E1	
	8	-	III	Y841	1 L	-	-	A64 A803	E1	

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****- Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2018/1480 (ATP 13)
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2019/521 (ATP 12)

- Container information:

Packaging to be fitted with child-resistant fastenings (see EC Regulation No. 1272/2008, Annex II, Part 3).

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):

<https://echa.europa.eu/substances-restricted-under-reach>.

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 2 : Hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

This sheet complements the technical instructions for use, but does not replace them. The information it contains are based on our knowledge of the product concerned on the date indicated. They are given in good faith. The attention of users is also drawn to the possible risks incurred when a product is utilisé for purposes other than those for which it is designed.

It does in no way the user from knowing and applying all texts governing his activity. It will take under its sole responsibility the precautions related to the use he makes of the product.

The regulatory requirements referred merely to assist the recipient to fulfill its obligations when using the product dangerous. This list should not be considered exhaustive and does not ensure the recipient qu'éventuellement other obligations incumbent on him not because of texts other than those cited for the holding and handling of the product for which it is solely responsible .

Wording of the phrases mentioned in section 3 :

H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

Abbreviations :

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

UFI : Unique formulation identifier.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.