

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 23-Nov-2009 Revision Date 09-Feb-2024 Revision Number 10

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

#### 1.1. Product identifier

Product Description: <u>Ammonia solution S.G. 0.92 (20%)</u>

Cat No. : A/3366/15, A/3366/21

Synonyms Ammonia solution; Ammonia water; Ammonium hydrate

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

Recommended Use Laboratory chemicals. Uses advised against No Information available

## 1.3. Details of the supplier of the safety data sheet

Company

UK entity/business name

Fisher Scientific UK

Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, United Kingdom

**EU entity/business name**Thermo Fisher Scientific
Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

Chemtrec US: (800) 424-9300 Chemtrec EU: 001-703-527-3887

Tel: 01509 231166

## **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

#### CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

#### **Physical hazards**

Based on available data, the classification criteria are not met

#### **Health hazards**

Skin Corrosion/Irritation Category 1 B (H314)

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Serious Eye Damage/Eye Irritation Specific target organ toxicity - (single exposure) Category 1 (H318) Category 3 (H335)

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#### **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements



#### Signal Word

#### **Danger**

#### **Hazard Statements**

H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

## **Precautionary Statements**

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 call a POISON CENTER or doctor/physician

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

#### 2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.2. Mixtures

| Component          | CAS No    | EC No             | Weight % | CLP Classification - According to<br>GB-CLP Regulations UK SI 2019/720 and<br>UK SI 2020/1567                        |
|--------------------|-----------|-------------------|----------|--|
| Ammonium hydroxide | 1336-21-6 | 215-647-6         | 20-22    | Skin Corr. 1B (H314) Eye Dam. 1 (H318) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)              |
| Ammonia            | 7664-41-7 | EEC No. 231-635-3 | -        | Flam. Gas 2 (H221) Skin Corr. 1B (H314) Acute Tox. 3 (H331) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) (EUH071) |
| Water              | 7732-18-5 | 231-791-2         | 78-80    | -  |

| Component | Specific concentration limits | M-Factor | Component notes |
|-----------|-------------------------------|----------|-----------------|

#### Ammonia solution S.G. 0.92 (20%)

 (SCL's)
 1

 Ammonium hydroxide
 STOT SE 3 (H335) :: C>=5%
 1

 Ammonia
 STOT SE 3 : C ≥ 5 %
 1

| Components Reach Registration Number |                  |                          |
|--------------------------------------|------------------|--------------------------|
| Ammonia                              | 01-2119488876-14 | (for the anhydrous form) |

Full text of Hazard Statements: see section 16

## **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required. Keep eye wide open while rinsing.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Call a physician

immediately.

**Ingestion** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Clean

mouth with water. Call a physician immediately.

**Inhalation** If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or

inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Remove from exposure, lie

down. Call a physician immediately.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

Causes burns by all exposure routes. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

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

Notes to Physician Treat symptomatically.

## **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

## Extinguishing media which must not be used for safety reasons

No information available.

## 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

#### **Hazardous Combustion Products**

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Nitragen evides (NOv) Ammenia Lludragen

Nitrogen oxides (NOx), Ammonia, Hydrogen.

#### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.2. Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

#### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

Technical Rules for Hazardous Substances (TRGS) 510 Class 8A Storage Class (LGK) (Germany)

#### 7.3. Specific end use(s)

Use in laboratories

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1. Control parameters

#### **Exposure limits**

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC

| - 1 |           |                    |                |           |
|-----|-----------|--------------------|----------------|-----------|
|     | Component | The United Kingdom | European Union | Ireland   |
|     | Component | The United Kingdom | European Union | II Clailu |

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| Ammonia | STEL: 35 ppm 15 min               | TWA: 20 ppm (8h)                   | TWA: 20 ppm 8 hr.                 |
|---------|-----------------------------------|------------------------------------|-----------------------------------|
|         | STEL: 25 mg/m <sup>3</sup> 15 min | TWA: 14 mg/m <sup>3</sup> (8h)     | anhydrous                         |
|         | TWA: 25 ppm 8 hr                  | STEL: 50 ppm (15min)               | TWA: 14 mg/m <sup>3</sup> 8 hr.   |
|         | TWA: 18 mg/m <sup>3</sup> 8 hr    | STEL: 36 mg/m <sup>3</sup> (15min) | anhydrous                         |
|         | _                                 |                                    | STEL: 50 ppm 15 min               |
|         |                                   |                                    | STEL: 36 mg/m <sup>3</sup> 15 min |

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

#### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values; Workers

| Component       | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|-----------------|------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| Ammonia         |                              | DNEL = 6.8mg/kg                 |                                | DNEL = 6.8mg/kg                   |
| 7664-41-7 ( - ) |                              | bw/day                          |                                | bw/day                            |

| Component                  | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|----------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Ammonia<br>7664-41-7 ( - ) | DNEL = 36mg/m <sup>3</sup>       | DNEL = 47.6mg/m <sup>3</sup>        | DNEL = 14mg/m <sup>3</sup>         | DNEL = 47.6mg/m <sup>3</sup>          |

#### **Predicted No Effect Concentration (PNEC)**

See values below.

| Component                  | Fresh water          | Fresh water sediment |                      | Microorganisms in<br>sewage treatment | Soil (Agriculture) |
|----------------------------|----------------------|----------------------|----------------------|---------------------------------------|--------------------|
| Ammonia<br>7664-41-7 ( - ) | PNEC =<br>0.0011mg/L |                      | PNEC =<br>0.0068mg/L |                                       |                    |

| Component                  | Marine water         | Marine water sediment | Marine water intermittent | Food chain | Air |
|----------------------------|----------------------|-----------------------|---------------------------|------------|-----|
| Ammonia<br>7664-41-7 ( - ) | PNEC =<br>0.0011mg/L |                       |                           |            |     |

#### 8.2. Exposure controls

## **Engineering Measures**

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

## Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

Hand Protection Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments        |
|----------------|-------------------|-----------------|-------------|-----------------------|
| Butyl rubber   | > 480 minutes     | 0.5 mm          | EN 374      | (minimum requirement) |
| Viton (R)      | > 480 minutes     | 0.4 mm          |             |                       |
| Neoprene       | > 480 minutes     | 0.45 mm         |             |                       |

Skin and body protection Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g.

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sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

When workers are facing concentrations above the exposure limit they must use **Respiratory Protection** 

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particulates filter conforming to EN 143 or Ammonia and organic ammonia derivatives filter Type K Green conforming to EN14387 Inorganic gases

and vapours filter Type B Grey

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure Small scale/Laboratory use

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

When RPE is used a face piece Fit Test should be conducted

**Environmental exposure controls** Prevent product from entering drains. Do not allow material to contaminate ground water

system. Local authorities should be advised if significant spillages cannot be contained.

Liquid

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### 9.1. Information on basic physical and chemical properties

Liquid **Physical State** 

Colorless **Appearance** Odor Ammonia-like **Odor Threshold** No data available Melting Point/Range No data available No data available **Softening Point** No information available **Boiling Point/Range** Flammability (liquid) No data available

Flammability (solid,gas) Not applicable

No data available **Explosion Limits** 

No information available **Flash Point** Method - No information available

**Autoignition Temperature** No data available **Decomposition Temperature** No data available 13.6

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**Viscosity** No data available

Water Solubility Soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

500 hPa @ 50 °C **Vapor Pressure** 

**Density / Specific Gravity** 0.920

**Bulk Density** Not applicable Liquid **Vapor Density** 0.59 (Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

No information available **Evaporation Rate** 

## **SECTION 10: STABILITY AND REACTIVITY**

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10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat.

10.5. Incompatible materials

Strong oxidizing agents. Metals. Acids. Halogens. Strong acids.

10.6. Hazardous decomposition products

Nitrogen oxides (NOx). Ammonia. Hydrogen.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

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

#### **Product Information**

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met

DermalNo data availableInhalationNo data available

#### Toxicology data for the components

| Component          | LD50 Oral                | LD50 Dermal | LC50 Inhalation   |
|--------------------|--------------------------|-------------|---|
| Ammonium hydroxide | LD50 > 350 mg/kg (Rat)   | -           | -   |
| Ammonia            | LD50 = 350 mg/kg ( Rat ) | -           | LC50 = 9850 mg/m³ (Rat) 1 h<br>LC50 = 13770 mg/m³ (Rat) 1 h |
| Water              | <u>-</u>                 | -           | -   |

(b) skin corrosion/irritation; Category 1 B

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

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Results / Target organs Respiratory system.

No data available (i) STOT-repeated exposure;

**Target Organs** No information available.

(j) aspiration hazard; No data available

Other Adverse Effects See actual entry in RTECS for complete information

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

#### 11.2. Information on other hazards

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

## **SECTION 12: ECOLOGICAL INFORMATION**

#### 12.1. Toxicity

**Ecotoxicity effects** Contains a substance which is:. Very toxic to aquatic organisms.

| Component          | Freshwater Fish  | Water Flea  | Freshwater Algae |
|--------------------|--|---|------------------|
| Ammonium hydroxide | 0.53 mg/l LC50 96h<br>0.75 - 3.4 mg/l LC50 96h<br>8.2 mg/L LC50 96h  | EC50: 0.66 mg/L/48h   | -                |
| Ammonia            | LC50: 0.26 - 4.6 mg/L, 96h (Lepomis macrochirus) LC50: = 1.17 mg/L, 96h flow-through (Lepomis macrochirus) LC50: 0.73 - 2.35 mg/L, 96h (Pimephales promelas) LC50: = 5.9 mg/L, 96h static (Pimephales promelas) LC50: > 1.5 mg/L, 96h (Poecilia reticulata) LC50: = 1.19 mg/L, 96h static (Poecilia reticulata) LC50: = 0.44 mg/L, 96h (Cyprinus carpio) | EC50 = 25.4 mg/L, 48h<br>(Daphnia magna)<br>NOEC = 0.79 mg/L<br>(Daphnia magna) |                  |

| Component          | Microtox              | M-Factor |  |
|--------------------|-----------------------|----------|--|
| Ammonium hydroxide | -                     | 1        |  |
| Ammonia            | EC50 = 2.0 mg/L 5 min | 1        |  |

## 12.2. Persistence and degradability

Persistence Soluble in water, Persistence is unlikely, based on information available.

Degradation in sewage water treatment plants. treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste

Bioaccumulation is unlikely 12.3. Bioaccumulative potential

The product is water soluble, and may spread in water systems. Will likely be mobile in the 12.4. Mobility in soil

environment due to its water solubility. Highly mobile in soils

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12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

**Endocrine Disruptor Information** 

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected substance This product does not contain any known or suspected substance

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. Should not

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be released into the environment.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information Do not flush to sewer. Waste codes should be assigned by the user based on the

application for which the product was used. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms. Solutions with high pH-value must be neutralized

before discharge. Do not let this chemical enter the environment.

## **SECTION 14: TRANSPORT INFORMATION**

#### IMDG/IMO

**14.1. UN number** UN2672

14.2. UN proper shipping name AMMONIA SOLUTION

14.3. Transport hazard class(es) 8
14.4. Packing group III

<u>ADR</u>

**14.1. UN number** UN2672

14.2. UN proper shipping name AMMONIA SOLUTION

14.3. Transport hazard class(es) 8 14.4. Packing group III

IATA

**14.1. UN number** UN2672

14.2. UN proper shipping name AMMONIA SOLUTION

14.3. Transport hazard class(es) 8 14.4. Packing group III

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required.

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14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

## **SECTION 15: REGULATORY INFORMATION**

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

#### **International Inventories**

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component          | CAS No    | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|--------------------|-----------|-----------|--------|-----|-------|------|----------|------|------|
| Ammonium hydroxide | 1336-21-6 | 215-647-6 | -      | -   | X     | X    | KE-01688 | X    | X    |
| Ammonia            | 7664-41-7 | 231-635-3 | -      | -   | X     | X    | KE-01625 | X    | X    |
| Water              | 7732-18-5 | 231-791-2 | -      | -   | X     | X    | KE-35400 | X    | -    |

| Component          | CAS No    | TSCA | TSCA Inventory<br>notification -<br>Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|--------------------|-----------|------|---|-----|------|------|-------|-------|
| Ammonium hydroxide | 1336-21-6 | Х    | ACTIVE  | X   | -    | X    | Х     | X     |
| Ammonia            | 7664-41-7 | Х    | ACTIVE  | X   | -    | X    | Х     | Х     |
| Water              | 7732-18-5 | Х    | ACTIVE  | X   | -    | X    | X     | Х     |

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### Authorisation/Restrictions according to EU REACH

| Component          | CAS No    | REACH (1907/2006) -<br>Annex XIV - Substances<br>Subject to Authorization | REACH (1907/2006) -<br>Annex XVII - Restrictions<br>on Certain Dangerous<br>Substances  | REACH Regulation (EC<br>1907/2006) article 59 -<br>Candidate List of<br>Substances of Very High<br>Concern (SVHC) |
|--------------------|-----------|---|---|---|
| Ammonium hydroxide | 1336-21-6 | -   | Use restricted. See item 75. (see link for restriction details) Use restricted. See item 65. (see link for restriction details) | -   |
| Ammonia            | 7664-41-7 | -   | Use restricted. See item<br>75.<br>(see link for restriction<br>details)  | -   |
| Water              | 7732-18-5 | -   | -   | -   |

#### **REACH links**

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

#### Seveso III Directive (2012/18/EC)

| Component          | CAS No    | Seveso III Directive (2012/18/EC) -<br>Qualifying Quantities for Major Accident<br>Notification | Seveso III Directive (2012/18/EC) -<br>Qualifying Quantities for Safety Repor<br>Requirements |  |
|--------------------|-----------|---|---|--|
| Ammonium hydroxide | 1336-21-6 | Not applicable  | Not applicable  |  |
| Ammonia            | 7664-41-7 | 50 tonne  | 200 tonne   |  |
| Water              | 7732-18-5 | Not applicable  | Not applicable  |  |

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

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Not applicable

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Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

#### **National Regulations**

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

**WGK Classification** 

Water endangering class = 2 (self classification)

| Component          | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|--------------------|---------------------------------------|-------------------------|
| Ammonium hydroxide | WGK2                                  |                         |
| Ammonia            | WGK2                                  |                         |

| Component                                 | Switzerland - Ordinance on the<br>Reduction of Risk from<br>handling of hazardous<br>substances preparation (SR<br>814.81) | Switzerland - Ordinance on<br>Incentive Taxes on Volatile<br>Organic Compounds (OVOC) | Switzerland - Ordinance of the<br>Rotterdam Convention on the<br>Prior Informed Consent<br>Procedure |  |
|---|--|---|--|--|
| Ammonium hydroxide<br>1336-21-6 ( 20-22 ) | Prohibited and Restricted<br>Substances  |   |  |  |

#### 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## **SECTION 16: OTHER INFORMATION**

#### Full text of H-Statements referred to under sections 2 and 3

H221 - Flammable gas

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H331 - Toxic if inhaled

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

EUH071 - Corrosive to the respiratory tract

#### Legend

**CAS** - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b)

Inventor

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic

Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

Substances List **ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

Ships

Transport Association

ATE - Acute Toxicity Estimate

#### Ammonia solution S.G. 0.92 (20%)

PBT - Persistent, Bioaccumulative, Toxic

vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air

MARPOL - International Convention for the Prevention of Pollution from

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ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor **VOC** - (Volatile Organic Compound)

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

#### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards On basis of test data **Health Hazards** Calculation method Calculation method **Environmental hazards** 

#### **Training Advice**

Chemical incident response training.

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

23-Nov-2009 **Creation Date Revision Date** 09-Feb-2024 Not applicable. **Revision Summary** 

## This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

## **End of Safety Data Sheet**