
MATERIAL SAFETY DATA SHEET

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

1.1 Product identifiers

Product name: Testing Solution No. 31

Ammonia Solution about 32%

0.88 AMMONIUM HYDROXIDE

Product Number:

- TS31
- 129144150
- 129144144

Brand: Solmedia Ltd

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

Identified uses: Test reagent

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Ltd.
- Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
- Telephone: 0844 80 80 900
- Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- H314 Skin corrosion, category 1B
- H335 Specific target organ toxicity (single exposure), category 3, vascular
- H400 Hazardous to the aquatic environment, acute, category 1

2.2 Label elements



Signal word: Danger

Hazard Statements

H314 Causes severe skin burns and eye damage

H335 May cause respiratory irritation

H400 Very toxic to aquatic life

Precautionary Statements

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

P273 Avoid release to the environment

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

305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P309+P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.

2.3 Other hazards

SVCH No

SECTION 3: Composition/information on ingredients

3.1 Substances Not applicable

Hazardous 2 Mixtures

Substance Name	Concentration	Product Identifier	Hazard classes and hazard categories
Ammonia in aqueous solution	25-35%	CAS No. 1336-21-6 EC No. 215-647-6 REACH No Not yet communicated Down the supply chain	Skin corrosion, category 1B –H314 Specific target organ toxicity (single exposure category 3 vascular –H335 Hazardous to the aquatic environment, acute category 1 – H400

SECTION 4: First Aid Measures

4.1 General Information

If exposed: Immediately call a POISON CENTRE/doctor/.... If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation

Immediately call a POISON CENTRE/doctor/.... Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion

Immediately call a POISON CENTRE/doctor/.... Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.

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

4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

4.5 Information to physician

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Extinguishing media which must not be used for safety reasons

No restriction

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Nitrogen oxides (NO_x) Sulphur oxides

5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

5.4 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers

SECTION 6: Accidental release measures

SECTION 6.1 Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Do not breathe dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated objects and areas thoroughly observing environmental regulations. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

6.4 Additional information

Clear spills immediately.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible:
Inhalation skin contact Eye contact

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature: 15-25 °C

Storage class: 8B

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

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique

(Without touching glove's outer surface) to avoid skin contact with this product. Dispose of

Contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK

(EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Appearance

Physical state: liquid Colour: colourless

(b) Odour: no data available

(c) Odour threshold: no data available

Safety relevant basic data

(d) pH: >14 (20 °C)

(e) Melting point/freezing point: -60 - -57.5 °C

(f) Initial boiling point and boiling range: 32 - 37.7 °C (1013 hPa)

(g) Flash point: no data available

(h) Evaporation rate: no data available

(i) Flammability (solid, gas): not applicable

(j) Upper/lower flammability or explosive limits

Lower explosion limit: no data available Upper explosion limit: no data available

(k) Vapour pressure: no data available

(l) Vapour density: no data available

(m) Relative density: 0.88 - 0.91 g/cm³ (20 °C)

(n) Solubility(ies) at 20 °C: no data available Soluble (g/L) in: no data available

(o) Partition coefficient: n-octanol/water: no data available

(p) Auto-ignition temperature: no data available

(q) Decomposition temperature: no data available

(r) Viscosity Kinematic viscosity: no data available Dynamic viscosity: no data available

(s) Explosive properties: not applicable

(t) Oxidising properties: not applicable

9.2 Other safety information

Bulk density: no data available

Refraction index: no data available

Dissociation constant: no data available

Surface tension: no data available

Henry constant: no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity: LD50 (oral. Rat): 350 mg/kg (RTECS)

Acute dermal toxicity: no data available

Acute inhalation toxicity: no data available

Irritant and corrosive effects

Primary irritation to the skin: Causes severe skin burns and eye damage.

Irritation to eyes: Causes serious eye damage.

Irritation to respiratory tract: May cause respiratory irritation.

Respiratory or skin sensitisation In case of skin contact: not sensitising

After inhalation: not sensitising

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Carcinogenicity
No indication of human carcinogenicity.

Germ cell mutagenicity No indications of human germ cell mutagenicity exist.

Reproductive toxicity No indications of human reproductive toxicity exist.

Aspiration hazard not applicable

Other adverse effects no data available

Additional information no data available

SECTION 12: Ecological information

12.1 Toxicity

Acute (short-term) fish toxicity: no data available

Chronic (long-term) fish toxicity: no data available

Acute (short-term) daphnia toxicity: no data available

Chronic (long-term) daphnia toxicity: no data available

Acute (short-term) algae toxicity: no data available

Chronic (long-term) algae toxicity: no data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

Appropriate disposal / Package Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

Additional information no data available

SECTION 14: Transport information

Land transport (ADR/RID)

- 14.1 UN-No.: 2672
- 14.2 Proper Shipping Name: AMMONIA SOLUTION
- 14.3 Class(es): 8 Classification code: C5 Hazard label(s): 8
- 14.4 Packing group: III
- 14.5 Environmental hazards: No
- 14.6 Special precautions for user: Hazard identification number (Kemler No.): 80 tunnel restriction code: E (Passage forbidden through tunnels of category E.)

Sea transport (IMDG)

- 14.1 UN-No.: 2672
- 14.2 Proper Shipping Name: 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 Class(es): 8 Classification code: Hazard label(s): 8
- 14.4 Packing group: III
- 14.5 Environmental hazards: No MARINE POLLUTANT: No
- 14.6 Special precautions for user: Segregation group: 18 EmS-No. F-A S-B
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

- 14.1 UN-No.: 2672
- 14.2 Proper Shipping Name: AMMONIA SOLUTION, relative density (specific gravity) between 0.880 and 0.957 at 15°C in water, with more than 10% but not more than 35% ammonia
- 14.3 Class(es): 8 Classification code: C5 Hazard label(s): 8
- 14.4 Packing group: III
- 14.5 Special precautions for user not relevant

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 as amended by Regulation (EU) 2015/830.

Water hazard class (WGK): hazardous to water (WGK 2)

EU: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance)

EU: Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance)

EU: Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance)

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.