

AMMONIA

Safety Data Sheet

1. IDENTIFICATION

Product name: AMMONIA

Synonyms

AMMONIA SOLUTION

Recommended use: Industrial strength, cleaner and degreaser. Suitable for cleaning ovens, stove tops and microwaves.

Supplier UDS PTY LTD

Address 3 SPIRETON PLACE, PENDLE HILL, NSW 2145

Telephone 02 9688 2022

Emergency NSW Poisons Information Centre 13 11 26

Email consumables@udcs.com.au

Web Site www.universaldrycleaningsolutions.com.au

SDS Date 21 JANUARY 2021 Version 1.2

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations, Australia (7th Edition)

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Skin Corrosion/Irritation: Category 1 B

Eye Damage/Irritation: Category 1

STOT Single Exposure: Category 3 (respiratory tract irritation) Hazardous to the Aquatic Environment – Acute Hazard: Category 1

Signal Word (s)

DANGER

Hazard Statement (s)

H314 C Causes severe skin burns and eye damage.

H335 May cause respiratory irritation

H400 Very toxic to aquatic life.

Pictogram(s)

Corrosion, Exclamation mark, Environment

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Precautionary statement – Prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash contaminated 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.

Precautionary statement – Response

GENERAL

P310 Immediately call a POISON CENTER or doctor/physician.

P391 Collect spillage.

INGESTION

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

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. SKIN

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

P363 Wash contaminated clothing before reuse. EYES

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 statement – Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

Precautionary statement – Disposal

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P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	EINECS	Proportion
Ammonium hydroxide	1336- 21- 6	215- 647- 6	10- 30 %

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash gently and thoroughly with water and non-abrasive soap for 15 minutes. Ensure contaminated clothing is washed before re-use or discard. Seek immediate medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (131 126)

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, dry chemical, foam, water fog or water mist.

Unsuitable Extinguishing Media

Do not use water jet.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases .

Specific Hazards Arising From The Chemical

Non combustible material. However, following evaporation of aqueous component under fire conditions, the non- aqueous component may decompose and/or burn. As a water based product, if spilt on electrical equipment the product will cause short-circuits.

Hazchem Code

2R

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Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Evacuate all unprotected personnel. Do not allow contact with skin and eyes. Do not breathe mist/vapour. It is essential to wear self-contained breathing apparatus (S.C.B.A) and full personal protective equipment and clothing to prevent exposure. Avoid exposure to spillage by collecting the material using vacuum and transfer into suitable labelled containers for subsequent recycling or disposal. Wash affected area thoroughly with soap and water. Dispose of waste according to applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Corrosive liquid. Attacks skin and eyes. Causes burns. Avoid breathing in vapours, mist or fumes. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Keep containers tightly closed. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.

Conditions for safe storage, including any incompatibilities

Corrosive liquid. Structural materials and lighting and ventilation systems in storage area should be corrosion resistant. Store in a cool, dry well-ventilated area away from foodstuffs, clothing, combustible and incompatible materials. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Protect from freezing.

For information on the design of the storeroom, reference should be made to Australian Standard AS 3780 The storage and handling of corrosive substances.

Storage Temperatures

Not available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No Exposure Limit Established

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information

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concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as neoprene rubber and nitrile rubber. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken.

Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Other Information

No exposure standards have been established for this material. As with all chemicals, exposure should be kept to the lowest possible levels.

Ammonia[7664

-41-7] TWA:

25ppm,

17mg/m³

STEL: 35ppm,

24mg/m³

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Source: Safe Work Australia

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Liquid

Appearance

Clear liquid

Colour

Colourless

Odour

Ammonia

Decomposition Temperature

Not available

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Melting Point

-58°C

Boiling Point

45°C

Solubility in Water

100g/100 mL

Specific Gravity

0.9

pH

13.8 (29%)

Vapour Pressure

483 hPa (20°C)

Vapour Density (Air=1)

0.60

Evaporation Rate

Not available

Odour Threshold

Not available

Viscosity

Refer to Section 9: Kinematic Viscosity and Dynamic Viscosity

Volatile Component

Not available

Partition Coefficient: n-octanol/water

Not available

Flash Point

Not applicable

Flammability

Non combustible material.

Auto-Ignition Temperature

651°C

Flammable Limits - Lower

Not applicable

Flammable Limits - Upper

Not applicable

Kinematic Viscosity

Not available

Dynamic Viscosity

Not available

10. STABILITY AND REACTIVITY

Reactivity

Refer to Section 10: Possibility of hazardous reactions

Chemical Stability

Stable under normal conditions of storage and handling.

Conditions to Avoid

Extremes of temperature and direct sunlight

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Incompatible materials

Acrolein, acids, halogens, metal, silver nitrates, silver oxides.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes including oxides of nitrogen and ammonia.

Possibility of hazardous reactions

Reacts with incompatible materials

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No toxicity data available for this material.

Ingestion

Ingestion of this product will cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach.

Inhalation

May cause respiratory irritation. Inhalation of mist or vapour will result in respiratory irritation and possible harmful corrosive effects including burns, lesions of the nasal septum, pulmonary edema, and scarring of tissue.

Skin

Causes burns. Corrosive to the skin. Skin contact can cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction.

Eye

Causes serious eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness.

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

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Ecotoxicity

Very toxic to aquatic life.

Persistence and degradability

Not available

Mobility

Not available

Bioaccumulative Potential

Not available

Other Adverse Effects

Not available

Environmental Protection

Do not discharge this material into waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information

This material is classified as Dangerous Goods Class 8 Corrosive Substances

Class 8: Corrosive substances Dangerous Goods are incompatible in a placard load with any of the following: Class 1: Explosives

Division 4.3: Dangerous when wet substances Division 5.1: Oxidising substances

Division 5.2: Organic peroxides

Class 6: Toxic or Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids.

Class 7: Radioactive materials unless specifically exempted

And are incompatible with food and food packaging in any quantity.

Note 2: Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered as strong.

U.N. Number

2672

UN proper shipping name

AMMONIA SOLUTION

Transport hazard class(es)

8

Packing Group

III

Hazchem Code

2R

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Special Precautions for User

Not available

IERG Number

37

UN Number (Air Transport, ICAO)

2672

IATA/ICAO Proper Shipping Name

Ammonia solution

IATA/ICAO Hazard Class

8

IATA/ICAO Packing Group

III

IATA/ICAO Symbol

Corrosive

IMDG UN No

2672

IMDG Proper Shipping Name

AMMONIA SOLUTION(Ammonium hydroxide) MARINE POLLUTANT

IMDG Hazard Class

8

IMDG Sub. Risk

P

IMDG Pack. Group

III

IMDG Marine pollutant

Yes

IMDG EMS

F-A,S-B

Transport in Bulk

Not available

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations, Australia

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poisons Schedule

S6

Hazard Category

Corrosive, Dangerous for the environment

16. OTHER INFORMATION

Additional Information

ABBREVIATIONS:

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ADB - Air-Dry Basis.

BEI - Biological Exposure Indices(s)

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

EINECS - European Inventory of Existing Commercial Substances.

GHS - Globally Harmonized System

IARC - International Agency for Research on Cancer.

M - moles per litre, a unit of concentration.

mg/m³ - Milligrams per cubic meter.

NOS - Not Otherwise Specified.

NTP - National Toxicology Program.

OSHA - Occupational Safety and Health Administration.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a UDS report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this UDS report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Report Status

This Safety Data Sheet document has been compiled by UDS. Further clarification regarding any aspect of this product should contact UDS directly. While UDS has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, UDS accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.