

SAFETY DATA SHEET
AMMONIA BUFFER SOLUTION

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1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: AMMONIA BUFFER SOLUTION

Product code: NRR105

Use / description of product: Solution. Corrosive, alkaline solutions. The regulatory information is dependent upon the concentration limit of the specific substance.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient 1: AMMONIA SOLUTION...50% 10-30%

CAS: 1336-21-6

EINECS: 215-647-6

[C] R34; [N] R50;

Ingredient 2: AMMONIUM CHLORIDE <10%

CAS: 12125-02-9

EINECS: 235-186-4

[Xn] R22; [Xi] R36;

3. HAZARDS IDENTIFICATION

Main hazards: Causes burns.

4. FIRST AID MEASURES (SYMPTOMS)

Skin contact: Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Blistering may occur. Severe burns may occur.

Eye contact: There may be irritation and redness. There may be severe pain. The eyes may water profusely. Corneal burns may occur.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting. Blood may be vomited.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. There may be coughing and a sore throat. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness.

4. FIRST AID MEASURES (ACTION)

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist

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examination.

Ingestion: Do not induce vomiting. If substance swallowed is corrosive, give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Carbon dioxide.

Exposure hazards: Corrosive. In combustion emits toxic fumes.

Protection of fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Refer to section 8 of SDS for personal protection details.

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

Clean-up procedures: Mix with sand or vermiculite. Transfer to a suitable container. Neutralise with dilute hydrochloric acid testing with litmus paper periodically. Carefully add to a large volume of water. Wash down the drain with large amounts of water.

7. HANDLING AND STORAGE

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

Eye protection: Safety goggles. Face-shield. Ensure eye bath is to hand.

Skin protection: Protective clothing with elasticated cuffs and closed neck.

TWA (8 hr exposure limit): 17 mg/m³ (Ammonia)

STEL (15 min exposure limit): 24mg/m³ (ammonia)

9. PHYSICAL AND CHEMICAL PROPERTIES

State: Liquid

Colour: Colourless

Odour: Irritating odour which may affect the eyes and respiratory system

Viscosity: Non-viscous

Oxidising: Non-oxidising (by EC criteria)

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Evaporation rate: Negligible
Solubility in water: Miscible in all proportions
pH: 10-11

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.
Conditions to avoid: Direct sunlight. Heat.
Materials to avoid: Strong acids. Finely powdered metals.
Haz. decomp. products: In combustion emits toxic fumes.

11. TOXICOLOGICAL INFORMATION

Effects of exposure Watering of the eyes. Nausea. Vomiting. Difficulty in breathing.
Ingredient 1: AMMONIA SOLUTION...50%
ORL RAT LD50 350mg/kg

12. ECOLOGICAL INFORMATION

Mobility: Non-volatile. Soluble in water.
Persistence and degradability: Biodegradable.
Bioaccumulative potential: No bioaccumulation potential.
Other adverse effects: Negligible ecotoxicity.

13. DISPOSAL CONSIDERATIONS

Waste disposal: Neutralise with dilute hydrochloric acid. Dispose of as normal industrial waste.
Disposal of packaging Dispose of as normal industrial waste.
NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION**ADR / RID**

UN no: 2672
ADR Class: 8
Hazard ID no: 80
Labelling: 8
Shipping name: AMMONIA SOLUTION WITH <35% BUT >10% AMMONIA

IMDG / IMO

UN no: 2672
Class: 8
Packing group: III
EmS: 8-06
Marine pollutant: NO
Labelling: 8

IATA / ICAO

UN no: 2672
Class: 8

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Packing group: III
Packing instructions: 813
Quantity: 60 L
Labelling: 8

15. REGULATORY INFORMATION

Hazard symbols: Corrosive.



Risk phrases: R34: Causes burns.

Safety phrases: S2: Keep out of the reach of children.

S24/25: Avoid contact with skin and eyes.

S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. ADDITIONAL INFORMATION

Risk phrases used in s.2: R34: Causes burns.
R50: Very toxic to aquatic organisms.
R22: Harmful if swallowed.
R36: Irritating to eyes.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.