

MSDS

Material Safety Data Sheet

Document No.: MSDS022

Version No.: 03

Effective Date: 25 Aug 2011

Nitric Acid Pouch

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1. Identification of the substance or preparation and the company/undertaking

Product Name: Nitric acid (69%)

Product number: R-300-004NAP-01

Company: Modern Water Monitoring Ltd

Unit 15 - 17, Cambridge Science Park

Cambridge, CB4 0FQ

UK

Telephone: +44 (0) 1483 696000 Email <u>info@modernwater.co.uk</u>

2. Composition/information on ingredients

Product name: Nitric acid pouch (4 mL)

CAS number: none EC number: none

Hazardous Ingredients Proportion CAS-No EC-No

Nitric acid 69% 7697-37-2 231-714-2

Symbol: O, C R-phrases: R8-35

Contact with combustible material may cause fire. Causes severe burns.

3. Hazards identification

Causes severe burns.

4. First aid measures

If swallowed: Wash out mouth thoroughly with water and give plenty of water to drink. Do not induce vomiting. Seek medical advice.

After eye contact: Irrigate thoroughly with water for at least 15 minutes. Obtain medical attention.

After skin contact: Remove contaminated clothing. Wash skin thoroughly with water and mild soap. Seek medical advice if irritation persists. Launder clothing before reuse.

If inhaled: Remove individual from contaminated air, rest and keep warm. If breathing is difficult give oxygen and seek medical assistance.

5. Fire-fighting measures

Not combustible. May evolve toxic fumes in fire. May ignite combustible material. Fire fighters should wear self contained breathing apparatus if exposure to fumes is likely. Use water spray or foam to control fire situation if compatible with other chemical products in the vicinity.

6. Accidental release measures

Wear protective clothing when dealing with spills. Neutralise with sodium bicarbonate. Absorb spills with sand or vermiculite. Ventilate area and wash spill site after material pickup is complete. Dispose of in accordance with local regulations.



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7. Handling and storage

Handling: Do not breathe vapour. Do not get in eyes, on skin or clothing. Change contaminated clothing. Wash hands after working with substance. Avoid prolonged or repeated exposure.

Storage: Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Observe good hygiene and housekeeping practices. Solution is acidic and may corrode metals.

8. Exposure controls and personal protection

UK Exposure Limits:

Nitric Acid: 10 mg/m³ Short term (4 ppm) & 5.2 mg/m³ long-term (2 ppm) (WEL)

Engineering Controls:

Always use this product with good general ventilation (10-15 changes of air in the room per hour) or preferably in a chemical fume hood. Maintain atmospheric concentrations as low as possible.

Personal Protection:

Avoid all skin and eye contact. Wear protective clothing including safety glasses and rubber or PVC gloves. Never pipette by mouth.

9. Physical and chemical properties

Appearance: Clear colourless Liquid

Boiling point (°C):

Vapour pressure (mmHg at 25°C):

Specific Gravity (g/mL):

Flash Point (°C):

Flammability limits (%):

Solubility in water (g/L):

86 (approx)

1.4 (approx)

Not flammable

Completely miscible

Other Properties: pH approx 1. Acidic solution. Will corrode metals. Will produce toxic gases on contact with cyanides, sulphides etc.

10. Stability and reactivity

Substances to be avoided: Metals, bases, oxidizable substances.

Hazardous decomposition products: Nitrous gases

11. Toxicological information

Strongly corrosive substance.

After ingestion: Tissue damage (mouth, oesophagus, gastrointestinal tract), severe pain (risk of perforation), bloody vomiting.

After skin contact: Cause burns.

After eye contact: Cause burns. Risk of Blindness.

After inhalation: Coughing, dyspnoea. Inhalation may lead to the formation of oedemas in the respiratory tract.

12. Ecological information



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Harmful effect due to pH shift.

Do not allow to enter drinking water supplies, waste water or soil.

13. Disposal considerations

Contact a licensed professional waste disposal service to dispose of this material. Observe local and national environmental regulations.

14. Transport information

Proper shipping name:-NITRIC ACID, C (corrosive) UN no: 2031, Class 8

Packaging group II

Volumes typically shipped are within the accepted quantity classification.

15. Regulatory information

Labelling according to EC directives

Symbol(s): C Corrosive.

R phrases: R35 Causes severe burns

S phrases: S23A-26-36/37/39-45

Do not breath fumes. In case of contact with eyes, wash immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show label if possible).

Within the UK, the use of this material must be assessed under the Control of Substances Hazardous to Health (COSHH) regulations.

16. Other information

None

All information given by the Company is offered in good faith and is believed to the best of our knowledge to be accurate. However this information is offered without warranty representation inducement or licence and the Company does not assume legal responsibility for reliance upon the same.

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