

Material Safety Data Sheet

Document No.: MSDS020

Version No.: 02

Effective Date: 25 Aug 2011

Hydrogen Peroxide

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

Product Name: Hydrogen Peroxide Product number: R-300-050HPE-01

company: Modern Water Monitoring Ltd

Unit 15 - 17, Cambridge Science Park

Cambridge, CB4 0FQ

UK

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

2. Composition/information on ingredients

Product name: Hydrogen Peroxide

<u>Hazardous Ingredients</u> <u>Proportion</u> <u>CAS-No</u> <u>EC-No</u>

Hydrogen Peroxide 30.0% 7722-84-1 231-765-0

Symbol: O C Xn

R-phrases: R5-8-35-20/22

Heating may cause explosion. Contact with combustible materials may cause fire. Causes

serious burns. Harmful by inhalation and if swallowed.

3. Hazards identification

Harmful if swallowed. Risk of serious damage to eyes. Irritating to eyes and skin.

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.

Has a fire-promoting effect due to release of oxygen. May ignite combustible material.

Use extinguisher to suit environment. Cool containers with water spray.



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6. Accidental release measures

Wear protective clothing when dealing with spills. Absorb spills with inert absorbent. Ventilate area and wash spill site after material pickup is complete. Dispose of in accordance with local regulations. Do not allow to enter sewerage system.

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. Do not empty into drains. Do not use metal equipment or containers

Storage: Store sealed in original container in a cool (below 15°C) well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Observe good hygiene and housekeeping practices.

8. Exposure controls and personal protection

UK Exposure Limits:

Hydrogen Peroxide: 2.8 mg/m³ Short term (2 ppm), 1.4 mg/m³ Long term (1 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): ~107°C

Vapour pressure: ~18 hPa (20°C)

Specific Gravity (g/mL): 1.1

Flash Point (°C): Not flammable

Flammability limits (%): Not flammable (May enhance combustion of other materials)

Solubility in water (g/L): Completely miscible

Other Properties: pH approx 2-4

10. Stability and reactivity

Heat sensitive, light sensitive.

Substances to be avoided: Metals, alkali hydroxides, metals in powdered form, metallic oxides, metallic salts, non-metals, non-metal oxides, ammonia, carbon, hydrazine and derivatives, hydrides, combustible substances, acids, anhydrides, oxidizing agents, impurities/dust, organic nitro compounds, brass.



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11. Toxicological information

After ingestion: Causes nausea and vomiting. Burns and possible perforation to oesophagus

and stomach.

After skin contact: Severe irritation.

After eye contact: Burns. Risk of blindness.

After inhalation: When vapours/aerosols are generated may get severe irritation of respiratory

tract and lungs.

Has been found to cause cancer in laboratory animals. Evidence of mutagenic effects.

12. Ecological information

Readily degradable in water

In high concentrations toxic effect on fish and plankton.

Do not allow to enter drinking water supplies.

13. Disposal considerations

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

14. Transport information

This product contains less than 35% of the following ingredient HYDROGEN PEROXIDE, AQUEOUS SOLUTION

UN no: 2014, Class 5.1 / 8

Packaging group II

Volumes typically shipped are within the accepted quantity classification.

15. Regulatory information

Labelling according to EC directives

Symbol(s): Xn Harmful R phrases: R22-41

Harmful if swallowed. Risk of serious eye damage.

S phrases: 26-39

In case of contact with eyes, wash immediately with plenty of water and seek medical advice.

Wear eye/face protection.

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.

Every person dealing with the materials referred to herein does so at his or her own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.



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