



Hydrogen Peroxide

H₂O₂

MASS	BOILING POINT	MELTING POINT	DENSITY
34.02g/mol	150.2°C	-0.43°C	1.11g/cm ³

Bench solution = 1M or 10vol



PRECAUTIONS:

When preparing solutions always wear appropriate PPE including eye protection and gloves. Always add acid to water (never water to acid). Use a fume cupboard. You should always carry out a risk assessment when using any chemicals. Follow all recommended safety procedures and adhere to the label instructions, hazard warnings and local legislations.

RECIPES:

100 vol. (30%) hydrogen peroxide is 8.3M (CORROSIVE).

20 vol. (6%) hydrogen peroxide is 1.7M (IRRITANT).

Care should be taken when opening the bottle that has been in storage, as pressure can build up. When using Hydrogen Peroxide, especially 100vol, chemical resistant gloves should be worn to avoid direct skin contact.

- 1 litre 0.02M – add 23ml 100vol. hydrogen peroxide to 977ml water
OR add 115ml 20vol. hydrogen peroxide to 885ml water.
- 1 litre 1M – add 115ml 100vol. hydrogen peroxide to 885ml water
OR add 570ml 20vol. hydrogen peroxide to 430ml water.
- 1 litre 10 vol. – add 100ml 100vol. hydrogen peroxide to 900ml water
OR add 500ml 20vol. hydrogen peroxide to 500ml water.
- 1 litre 20 vol. (IRRITANT) – add 200ml 100vol. hydrogen peroxide to 800ml water.

Hydrogen Peroxide has a short shelf life – keep out of direct sunlight. Store diluted solutions in amber glass or dark containers. Ensure bottles or containers are labelled correctly with necessary hazard symbols.

EXPERIMENTS:

Hydrogen Peroxide can be used in the following experiments (scan or see website for details):



Decomposition
Using Catalysts



Elephant's
Toothpaste



Six Fun
Experiments



CORROSIVE



IRRITANT

CONVERSIONS:

- 1ml = 1 millilitre = 1cm³ = 1/1000th Litre
- 1 Litre = 1dm³ = 1000ml
- 1M = 1mol dm⁻³ = 1 mol l⁻¹ = 1 mole per litre

WATER:

Distilled water should be used unless otherwise stated. Tap water is not suitable as it contains impurities.

Order your
ingredients **24/7**
at **SciChem.com**

