



# HEPES (1M)

## For research use only

Catalogue number: BI-1204

### Product Description

HEPES (4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid), a zwitterionic organic chemical buffering agent is used for better maintaining the physiological pH changes (pH 6.8 to 8.2) in carbon dioxide concentrations. As one of the best all-purpose buffers in cell culture, HEPES has widely used in the range of 10 to 25 mM. After the addition of HEPES pH is adjusted with NaOH or HCl. HEPES is not recommended for certain downstream protein applications such as Folin-Ciocalteu protein assay. The Biuret protein assay is unaffected.

This specification is produced in two different volumes of 50ml (BI-1204-03) and 100ml (BI-1204-01).

### Physical Description

**Appearance:** Clear Colorless liquide

**Molecular formula:** C<sub>8</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>S

**Molecular weight:** 238.3

**pKa1:**  $\approx 3$

**pKa2:**

- 7.85 at 0°C
- 7.55 at 20°C
- 7.31 at 37°C
- $\Delta pK/\Delta T = -0.014/^{\circ}C$

### References

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