Triethylammonium bicarbonate buffer

Catalog Number T7408
Storage Temperature 2–8 °C

CAS Number 15715-58-9
Synonyms: TEAB, triethylammonium hydrogen carbonate buffer

Product Description
This product is a 1.0 M solution, pH 8.5.

Triethylammonium bicarbonate (TEAB) is a buffer, composed of a combination of triethylamine and carbon dioxide, the latter occuring in solution as bicarbonate. TEAB has been applied for use in electrophoresis and ion-exchange chromatography.1 The volatility of TEAB facilitates sample recovery after chromatographic analysis and makes TEAB a buffer of interest for mass spectrometric analysis of biomolecules.

TEAB has been utilized to coat Amberlite® XAD-4 resin for the separation of nucleic acid hydrolysis products.2 Several reports have described the use of TEAB in HPLC resolution of nucleotides, such as the separation of 5’-adenosine di- and triphosphates from inorganic pyrophosphate or imidodiphosphate, and the resolution of groups of nucleoside diphosphates and nucleoside triphosphates.3,4 HPLC-ESI MS methods for the study of oligonucleotides using TEAB have been described.5-7 Proteins have also been analyzed by ESI-MS with TEAB buffer.8

The preparation of TEAB by passing carbon dioxide gas into a 1.0 M aqueous solution of triethylamine at 5 °C has been described.5

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

References

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SN,MAM 07/16-1