

Product Name & Product No.

Product Name: TEMED 【110-18-9】
Product No.: T007

Storage

Store at 4°C.

Spec.

Chemical Name: N,N,N',N'-
Tetramethylethylenediamine
Chem Formula: C₆H₁₆N₂
Molecular Weight: 116.2
Assay: 99.9% min.
pH: 8.0

Introduction

TEMED is a tertiary amine that is used to catalyze the formation of free radicals from ammonium persulfate or riboflavin. Such TEMED generated free radicals cause the compounds acrylamide and bis-acrylamide to polymerize and form the gel matrix polyacrylamide. Polyacrylamide gels are commonly used for the electrophoretic resolution of macromolecules such as nucleic acids and proteins. Because TEMED is functional only in its free base form, low pH conditions will inhibit polymerization.

The potential contribution of TEMED to elevated background in silver stained SDS PAGE has been studied. TEMED has been used in the coating of soft polymers, such as polyacrylamide, in capillaries for investigation by atomic force microscopy. Microchips containing oligonucleotides and proteins immobilized within gel pads have been prepared using TEMED. The capillary isoelectric focusing of proteins with an isoelectric point (pI) > 12 has been investigated through the use of TEMED. TEMED has been used in the HPLC of small organic molecules.

Working Conc.

50uL/100mL