

> Temed

cat. no.	amount	note
STS-TE 25	25ml	liquid
STS-TE 100	100ml	liquid

TEMED is a tertiary amine widely employed as a ligand for metal ions. It forms stable complexes with many metal halides, e.g. zinc chloride and copper(I) iodide, giving complexes that are soluble in organic solvents. In such complexes, TEMED serves as a bidentate ligand.

TEMED has an affinity for lithium ions. It converts butyl lithium into a cluster of higher reactivity than the hexamer. BuLi/TMEDA is able to metallate or even doubly metallate many substrates including benzene, furan, thiophene, N-alkylpyrroles, and ferrocene. Many anionic organometallic complexes have been isolated as their $[Li(tmeda)_2]^+$ complexes. In such complexes $[Li(tmeda)_2]^+$ behaves like a quaternary ammonium salt, such as $[NEt_4]^+$.

TEMED is used to catalyze formation of free radicals from ammonium persulfate and riboflavin .

TEMED is suitable in electrophoresis for the separation of proteins or nucleic acids and tested as a catalyst with ammonium persulfate to catalyze the polymerization of acrylamide when making polyacrylamide gels.

Chemical Name

N, N, N',N'-Tetramethylethylenediamine

Formulation

$C_6H_{16}N_2$

Molecular Weight

116,2

Purity

>99%

Solubility

Temed is soluble in water, yielding a clear solution.

Storage

Store at 4°C.

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