PRODUCT INFORMATION

MTSET (chloride)
Item No. 21069

Formal Name: N,N,N-trimethyl-2-[(methylsulfonyl)thio]-ethanaminium, monochloride
MF: C$_6$H$_{16}$NO$_2$S$_2$ • Cl
FW: 233.8
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

MTSET (chloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the MTSET (chloride) in the solvent of choice. MTSET (chloride) is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 2 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of MTSET (chloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of MTSET (chloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

MTSET (chloride) is a methanethiosulfonate (MTS), a sulfhydryl-reactive compound that forms mixed disulfide linkages. It is a positively charged sulfhydryl-specific reagent that reacts with substituted cysteines. It can provide functional information about relative positions of amino acids within a protein and can be used to probe binding site electrostatic interactions.1-3

References