PRODUCT INFORMATION

Pyrazinamide
Item No. 23416

CAS Registry No.: 98-96-4
Formal Name: 2-pyrazinecarboxamide
Synonyms: Aldinamide, MK 56, NSC 14911,
a-Pyrazinamide, Pyrazinecarboxamide,
Pyrazinoic Acid Amide
MF: C$_5$H$_5$N$_3$O
FW: 123.1
Purity: ≥98%
UV/Vis.: λ$_{max}$: 269 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

Pyrazinamide is supplied as a crystalline solid. A stock solution may be made by dissolving the pyrazinamide in the solvent of choice. Pyrazinamide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of pyrazinamide in these solvents is approximately 0.2, 30, and 25 mg/ml, respectively.

Pyrazinamide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, pyrazinamide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Pyrazinamide has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Pyrazinamide is an antimycobacterial compound that inhibits the growth of the human M. tuberculosis H37Rv strain (MIC = 150 μg/ml).\textsuperscript{1} It increases survival in M. tuberculosis H37Rv-infected mice when administered orally (0.1% w/w in the diet) or subcutaneously (2.5 mg single injection) on the day of infection.\textsuperscript{2} Pyrazinamide also inhibits the growth of M. lepraemurium in infected mice.\textsuperscript{3} Formulations containing pyrazinamide have been used as first-line treatments of M. tuberculosis.\textsuperscript{4}

References