

Product Name: Dipicolinic acid

Product Number: D084

CAS Number: 499-83-2

Molecular Formula: $C_7H_5NO_4$

Molecular Weight: 167.1

Description: Dipicolinic acid is an amphoteric polar metabolite produced by many bacterial and fungal species. Prior to its discovery as a microbial metabolite, dipicolinic acid had long been recognised as a chelating agent for many metal ions. Wide distribution of dipicolinic acid among microbes makes it an important dereplication standard in discovery. Dipicolinic acid reaches high concentrations (~10% w/w) in *Bacillus* endospores aiding heat resistance and is used in laboratories as a marker for the effectiveness of sterilisation.

Dipicolinic acid is soluble in ethanol, methanol, DMF or DMSO.

References: Isolation of dipicolinic acid (pyridine-2:6-dicarboxylic acid) from spores of *Bacillus megatherium*. Powell J.F. Biochem J. 1953, 54, 210.

Role of dipicolinic acid in survival of *Bacillus subtilis* spores exposed to artificial and solar UV radiation. Sliemandagger T.A. and Nicholson W.L. Appl. Environ. Microbiol. 2001, 67, 1274.