4,4’-Dimethoxyoctafluorobiphenyl
Item No. 18652

CAS Registry No.: 2200-71-7
Formal Name: 2,2',3,3',5,5',6,6'-octafluoro-4,4'-dimethoxy-1,1'-biphenyl
Synonym: NSC 97033
MF: C14H6F8O2
FW: 358.2
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max} 244 nm

Laboratory Procedures

For long term storage, we suggest that 4,4’-dimethoxyoctafluorobiphenyl be stored as supplied at -20°C. It should be stable for at least two years.

4,4’-Dimethoxyoctafluorobiphenyl is supplied as a crystalline solid. A stock solution may be made by dissolving the 4,4’-dimethoxyoctafluorobiphenyl in the solvent of choice. 4,4’-Dimethoxyoctafluorobiphenyl is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 4,4’-dimethoxyoctafluorobiphenyl in ethanol and DMF is approximately 30 mg/ml and approximately 20 mg/ml in DMSO.

4,4’-Dimethoxyoctafluorobiphenyl is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 4,4’-dimethoxyoctafluorobiphenyl should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 4,4’-Dimethoxyoctafluorobiphenyl has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

4,4’-Dimethoxyoctafluorobiphenyl is a compound that has been used to investigate the relationship between intramolecular rotational dynamics and molecular and crystal structure using NMR spin-lattice relaxation experiments.¹

Reference