

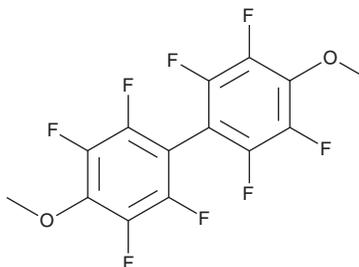
PRODUCT INFORMATION



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:	C ₁₄ H ₆ F ₈ O ₂
FW:	358.2
Purity:	≥95%
UV/Vis.:	λ _{max} : 244 nm
Supplied as:	A crystalline solid
Stability:	≥2 years at -20°C
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

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, which should be purged with an inert gas. 4,4'-Dimethoxyoctafluorobiphenyl is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). 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

1. Fahey, D.P., Dougherty, W.G., Jr., Kassel, W.S., *et al.* Nonexponential solid state ¹H and ¹⁹F spin-lattice relaxation, single-crystal X-ray diffraction, and isolated-molecule and cluster electronic structure calculations in an organic solid: Coupled methyl group rotation and methoxy group libration in 4,4'-dimethoxyoctafluorobiphenyl. *J. Phys. Chem. A.* **116(48)**, 11946-11956 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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