



Product Information

Anisole

Product Number **A 4405**
Store at Room Temperature

Product Description

Molecular Formula: C_7H_8O
Molecular Weight: 108.1
CAS Number: 100-66-3
Boiling Point: 155.5 °C (760 torr)¹
Density: 0.9956 g/ml (18 °C)¹
Synonym: methoxybenzene

Anisole is a solvent used in the synthesis of organic compounds and in large-scale applications such as the production of perfumes.¹ Anisole has been used directly in the synthesis of the marine pyrrole alkaloids polycitone A and B and the nonylphenol isomer 4-(3',6'-dimethyl-3-heptyl)phenol.^{2,3} Anisole may also be utilized in the preparation of inorganic complexes and materials, such as tin-core/tin oxide nanoparticles.⁴

Anisole is frequently used in the solid-phase synthesis of compounds, particularly in the cleavage of compounds from the resin, such as phosphopeptides, 2-(arylamino)quinazolinones and 1,5-disubstituted 2-aryliminoimidazolidines.^{5,6,7}

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is miscible in ethanol [0.1 ml/ml, 10% (v/v)], yielding a clear, colorless solution. It is also miscible in ether. This product is insoluble in water.¹

References

1. The Merck Index, 12th ed., Entry# 707.
2. Kreipl, A. T., et al., Total syntheses of the marine pyrrole alkaloids polycitone A and B. *Org. Lett.*, **4(19)**, 3287-3288 (2002).
3. Lalah, J. O., et al., Regioselective synthesis of a branched isomer of nonylphenol, 4-(3',6'-dimethyl-3'-heptyl)phenol, and determination of its important environmental properties. *Chemistry*, **7(22)**, 4790-4795 (2001).
4. Nayral, C., et al., Synthesis of tin and tin oxide nanoparticles of low size dispersity for application in gas sensing. *Chemistry*, **6(22)**, 4082-4090 (2000).
5. Perich, J. W., et al., Solid phase synthesis of pp60src-related phosphopeptides via 'global' phosphorylation and their use as substrates for enzymatic phosphorylation by casein kinase-2. *Bioorg. Med. Chem.*, **4(2)**, 143-150 (1996).
6. Yu, Y., et al., A traceless approach for the parallel solid-phase synthesis of 2-(arylamino)quinazolinones. *J. Org. Chem.*, **67(16)**, 5831-5834 (2002).
7. Yu, Y., et al., Solid-phase synthesis of 1,5-disubstituted 2-aryliminoimidazolidines. *J. Org. Chem.*, **67(9)**, 3138-3141 (2002).

GCY/RXR 3/03

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.