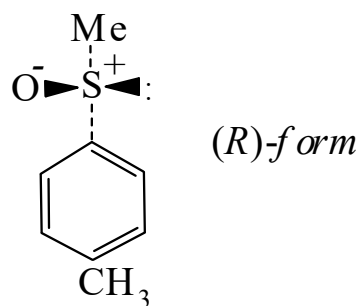




>>Entry Name: Methyl 4-methylphenyl sulfoxide

Synonym(s): 1-Methyl-4-(methylsulfinyl)benzene, 9CI. Methyl *p*-tolyl sulfoxide



CAS Registry Number: 934-72-5

Molecular Formula: C₈H₁₀OS

Molecular Weight: 154.232

Accurate Mass: 154.045235

Percentage Composition: C 62.30%; H 6.53%; O 10.37%; S 20.79%

>>Variant: (*R*)-form

CAS Registry Number: 1519-39-7

Molecular Formula: C₈H₁₀OS

Molecular Weight: 154.232

Accurate Mass: 154.045235

Percentage Composition: C 62.30%; H 6.53%; O 10.37%; S 20.79%

Physical Description: Orthorhombic cryst. (hexane/Et₂O)

Melting Point: Mp 74-76°

Optical Rotation: [α]_D²⁵+146 (c, 2.0 in Me₂CO)

Aldrich: 34360-9

Fluka: 69422

>>Variant: (*S*)-form

CAS Registry Number: 5056-07-5

Molecular Formula: C₈H₁₀OS

Molecular Weight: 154.232

Accurate Mass: 154.045235

Percentage Composition: C 62.30%; H 6.53%; O 10.37%; S 20.79%

Melting Point: Mp 74.5°

Optical Rotation: [α]_D²⁵-145 (c, 2.0 in Me₂CO)

Aldrich: 33999-7

Fluka: 69425

>>Variant: (±)-form

CAS Registry Number: 39066-80-3

Molecular Formula: C₈H₁₀OS

Molecular Weight: 154.232

Accurate Mass: 154.045235

Percentage Composition: C 62.30%; H 6.53%; O 10.37%; S 20.79%

Melting Point: Mp 42-43°. Mp 50-54°

Boiling Point: Bp₃₈ 168°

pK_a Value: pK_a -2.22 (H₂SO₄ or HClO₄)

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