



>>Entry Name: **2,4-Dimethylbenzenesulfonic acid**, 9Cl
Synonym(s): 2,4-Xylenesulfonic acid, 8Cl. *m*-Xylene-4-sulfonic acid

CAS Registry Number: 88-61-9
Related CAS Registry Numbers(s): 827-21-4
Extra CAS Registry Numbers(s): 1300-72-7 25321-41-9
Structure by analogy with 2,3-Dimethylbenzenesulfonic acid, [DSX21-S](#)

Molecular Formula: C₈H₁₀O₃S
Molecular Weight: 186.231
Accurate Mass: 186.035065
Percentage Composition: C 51.60%; H 5.41%; O 25.77%; S 17.22%
Physical Description: Plates or prisms + 2H₂O (H₂O)
Melting Point: Mp 61-62°

Rare Chemicals Library: S55977-6

>>Derivative: Fluoride

CAS Registry Number: 445-15-8
Molecular Formula: C₈H₉FO₂S
Molecular Weight: 188.222
Accurate Mass: 188.030728
Percentage Composition: C 51.05%; H 4.82%; F 10.09%; O 17.00%; S 17.04%
Boiling Point: Bp 246°. Bp₁₅ 149-150°

>>Derivative: Chloride

CAS Registry Number: 609-60-9
Molecular Formula: C₈H₉ClO₂S
Molecular Weight: 204.677
Accurate Mass: 204.001177
Percentage Composition: C 46.95%; H 4.43%; Cl 17.32%; O 15.63%; S 15.67%
Physical Description: Cryst.
Melting Point: Mp 34°

>>Derivative: Amide

CAS Registry Number: 7467-12-1
Molecular Formula: C₈H₁₁NO₂S
Molecular Weight: 185.246
Accurate Mass: 185.051049
Percentage Composition: C 51.87%; H 5.98%; N 7.56%; O 17.27%; S 17.31%
Physical Description: Needles (H₂O)
Melting Point: Mp 138-139°

>>Derivative: Anhydride

CAS Registry Number: 58811-91-9
Molecular Formula: C₁₆H₁₈O₅S₂
Molecular Weight: 354.447
Accurate Mass: 354.059565
Percentage Composition: C 54.22%; H 5.12%; O 22.57%; S 18.09%
Melting Point: Mp 139°
Other Data: Dec. on standing

References:

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Pollak, J. *et al.*, *Monatsh. Chem.*, 1928, **50**, 237, (*synth*)
Huntress, E.H. *et al.*, *J.A.C.S.*, 1941, **63**, 3446, (*synth*)
Czech. Pat., 1976, 165 237; *CA*, **86**, 139621, (*synth*)
El Homsy, A. *et al.*, *J. Chromatogr.*, 1978, **151**, 413, (*glc*)
Roemmele, R.C. *et al.*, *J.O.C.*, 1988, **53**, 2367, (*chloride, synth, pmr, ir*)
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