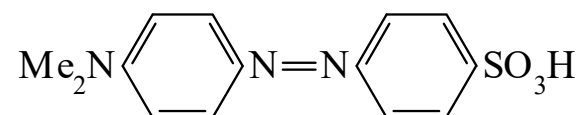




>>Entry Name: **Methyl orange**

Synonym(s): 4-[[4-(Dimethylamino)phenyl]azo]benzenesulfonic acid, 9Cl. Acid orange 52. C.I. 13025



Molecular Formula: C₁₄H₁₅N₃O₃S

Molecular Weight: 305.357

Accurate Mass: 305.083412

Percentage Composition: C 55.07%; H 4.95%; N 13.76%; O 15.72%; S 10.50%

>>Derivative: Na salt

CAS Registry Number: 547-58-0

Use/Importance: Used as 0.1% aq. soln. as an acid-base indicator. (pH range: 3.1-4.4; colour change: red → yellow); indicator in bromatometry; photometric detn. of Cl₂ (ε 40000) Br₂, extraction-photometric detn. of Fe(II). Biological stain

Physical Description: Orange-yellow cryst. powder

Solubility: Sol. H₂O; insol. EtOH

Aldrich: 24138-5

Fluka: 68250

Sigma: M1400

>>Derivative: Chloride

Synonym(s): 4'-Dimethylaminoazobenzene-4-sulfonyl chloride. Dabsyl chloride

CAS Registry Number: 56512-49-3

Molecular Formula: C₁₄H₁₄ClN₃O₂S

Molecular Weight: 323.802

Accurate Mass: 323.049524

Percentage Composition: C 51.93%; H 4.36%; Cl 10.95%; N 12.98%; O 9.88%; S 9.90%

Use/Importance: Fluorogenic reagent for amines, amino acids and alcohols

Physical Description: Deep red cryst.

Melting Point: Mp 186-188°

Aldrich: 22626-2

Fluka: 39068

Sigma: D7772

>>Derivative: Hydrazide

Synonym(s): Dabsyl hydrazine. DABS-hydrazide

CAS Registry Number: 72565-41-4

Molecular Formula: C₁₄H₁₇N₅O₂S

Molecular Weight: 319.387

Accurate Mass: 319.110295

Percentage Composition: C 52.65%; H 5.36%; N 21.93%; O 10.02%; S 10.04%

Use/Importance: Reagent for the hplc anal. of monosaccharides and aldehydes

Physical Description: Orange cryst. (EtOH)

Melting Point: Mp 163-164°

References: