>>**Derivative:** *N*-Bromo
Synonym(s): Bromamine B

CAS Registry Number: 16917-09-2

Molecular Formula: $C_6H_6BrNO_2S$
Molecular Weight: 236.089
Accurate Mass: 234.95026
Percentage Composition: C 30.52%; H 2.56%; Br 33.84%; N 5.93%; O 13.55%; S 13.58%
Use/Importance: Used for indirect titrimetric detn. of $I^{(-)}$ and $NCS^{(-)}$
Physical Description: Cryst. (H_2O)

>>**Derivative:** *N*,*N*-Dibromo
Synonym(s): Dibromamine B. *N,N*-Dibromobenzenesulfonamide, 9CI

CAS Registry Number: 938-05-6

Molecular Formula: $C_6H_5Br_2NO_2S$
Molecular Weight: 314.985
Accurate Mass: 312.880771
Percentage Composition: C 22.88%; H 1.60%; Br 50.74%; N 4.45%; O 10.16%; S 10.18%
Use/Importance: Used as 0.025*M* soln. in glacial AcOH for indirect titrimetric detn. of $CN^{(-)}$ and $NCS^{(-)}$ (with $I^{(-)}$ and $S_2O_3^{2(-)}$)
Physical Description: Yellow cryst. ($CHCl_3$)
Melting Point: Mp 116 dec.° (110-110°)
Solubility: Sol. AcOH

>>**Derivative:** *N*-Hydroxy
Synonym(s): Benzenesulfohydroxamic acid. *N*-Hydroxybenzenesulfonamide, 9CI. Benzenesulfonylhydroxylamine. Piloty's acid

CAS Registry Number: 599-71-3

Molecular Formula: $C_6H_7NO_3S$
Molecular Weight: 173.192
Accurate Mass: 173.014664
Percentage Composition: C 41.61%; H 4.07%; N 8.09%; O 27.71%; S 18.51%
Use/Importance: Used for extraction-photometric detn. of Nb (λ_{max} 320 nm, $CHCl_3$)
Physical Description: Plates (H_2O)
Melting Point: Mp 126 dec.° (109-110°)
Solubility: Sol. H_2O, Me_2CO, EtOH, Et_2O, AcOH

Fluka: 12600

>>**Derivative:** *N*-Me

CAS Registry Number: 5183-78-8
Molecular Formula: $C_7H_9NO_2S$
Molecular Weight: 171.22
Accurate Mass: 171.035399
Percentage Composition: C 49.10%; H 5.30%; N 8.18%; O 18.69%; S 18.73%
Physical Description: Hygroscopic cryst.
Melting Point: Mp 30-31°
Boiling Point: Bp_{17} 202.5°

>>**Derivative:** *N*,*N*-Di-Me

Molecular Formula: $C_8H_{11}NO_2S$
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: Cryst.
Melting Point: Mp 47-48°