



>>Entry Name: Tetrafluoroborate(1-), 11Cl, 10Cl, 9Cl, 8Cl

CAS Registry Number: 14874-70-5

Related CAS Registry Numbers(s): 34216-27-8
[BF₄]⁽⁻⁾

Molecular Formula: BF₄⁽⁻⁾

Molecular Weight: 86.805

Accurate Mass: 87.002917

Percentage Composition: B 12.45%; F 87.55%

>>Derivative: Na salt

>>Derivative: K salt

>>Derivative: H compd.

>>Derivative: NH₄ salt

Synonym(s): Ammonium tetrafluoroborate

CAS Registry Number: 13826-83-0

Molecular Formula: BF₄H₄N

Molecular Weight: 104.843

Accurate Mass: 105.037291

Percentage Composition: B 10.31%; F 72.48%; H 3.85%; N 13.36%

Physical Description: Colourless cryst.

Aldrich: 20284-3

Fluka: 9736

>>Derivative: Nitrosyl salt

Synonym(s): Nitrosyl tetrafluoroborate

CAS Registry Number: 14635-75-7

Molecular Formula: BF₄NO

Molecular Weight: 116.811

Accurate Mass: 117.000906

Percentage Composition: B 9.26%; F 65.06%; N 11.99%; O 13.70%

Use/Importance: Commercially available - used in org. and organomet. chem. as source of NO groups. Activator of organosulfur compds., e.g. S-glycosides

Physical Description: Colourless cryst., easily hydrol.

Solubility: Sol. MeCN

Other Data: Subl. without dec.

Aldrich: 17506-4

Fluka: 74010

>>Derivative: Nitronium salt

Synonym(s): Nitryl salt

CAS Registry Number: 13826-86-3

Molecular Formula: BF₄NO₂

Molecular Weight: 132.81

Accurate Mass: 132.995821

Percentage Composition: B 8.14%; F 57.22%; N 10.55%; O 24.09%

Use/Importance: Used in nitration of org. compds.

Physical Description: Colourless cryst.; easily hydrol.

Solubility: Spar. sol. MeCN, MeNO₂

Other Data: Strong oxidising agent

Aldrich: 17630-3

Fluka: 73509

>>Derivative: Trimethyloxonium