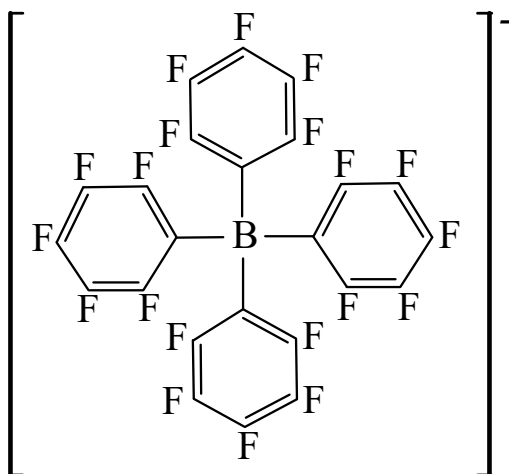




>>Entry Name: Tetrakis(pentafluorophenyl)borate(1-), 12Cl

Synonym(s): Tetrakis(pentafluorophenyl)boronate



CAS Registry Number: 47855-94-7

Molecular Formula: $C_{24}BF_{20}^{(-)}$

Molecular Weight: 679.043

Accurate Mass: 678.977365

Percentage Composition: C 42.45%; B 1.59%; F 55.96%

Other Data: $R_3Si^{(+)}$ salts (R = Me, Et, Pr^i , Me_3Si) also descr. Anion with low coordinating ability stabilises the silylium cation

>>Derivative: Li salt

CAS Registry Number: 2797-28-6

Molecular Formula: $C_{24}BF_{20}Li$

Molecular Weight: 685.984

Percentage Composition: C 42.02%; B 1.58%; F 55.39%; Li 1.01%

Use/Importance: Battery electrolyte

Physical Description: Air-stable solid

Solubility: Sol. H_2O

>>Derivative: Na salt

CAS Registry Number: 149213-65-0

Molecular Formula: $C_{24}BF_{20}Na$

Molecular Weight: 702.033

Percentage Composition: C 41.06%; B 1.54%; F 54.12%; Na 3.27%

Use/Importance: Commercially available

>>Derivative: Tritylium salt

CAS Registry Number: 136040-19-2

Molecular Formula: $C_{43}H_{15}BF_{20}$

Molecular Weight: 922.37

Percentage Composition: C 55.99%; H 1.64%; B 1.17%; F 41.19%

Use/Importance: Catalyst for polym. of alkenes

Physical Description: No phys. props. reported

>>Derivative: *N,N*-Dimethylanilinium salt

CAS Registry Number: 118612-00-3

Use/Importance: Catalyst component for polym. of alkenes

Physical Description: Solid

References:

- Massey, A.G. *et al.*, *Proc. Chem. Soc., London*, 1963, 212, (*synth*)
Ger. Pat., 1979, 2 901 367; *CA*, **92**, 61799p, (*use*)
Horowitz, H.H. *et al.*, *Proc. Electrochem. Soc.*, 1981, **81**, 131
Chien, J.C.W. *et al.*, *J.A.C.S.*, 1991, **113**, 8570, (*use*)
Lambert, J.B. *et al.*, *Chem. Comm.*, 1993, 383, (*synth*, *B-11 nmr*, *F-19 nmr*)
Tjaden, E.B. *et al.*, *Organometallics*, 1995, **14**, 371-386, (*dimethylanilinium salt*, *synth*, *pmr*)
Haufe, M. *et al.*, *J. Organomet. Chem.*, 1996, **520**, 121-129, (*dimethylanilinium salt*, *synth*, *ir*, *pmr*, *cmr*, *F-19 nmr*)
Piers, W.E. *et al.*, *Chem. Soc. Rev.*, 1997, **26**, 345-354, (*rev*)