Tetrabutylammonium hexafluorophosphate

Other names:	1-Butanaminium, N,N,N-tributyl-, hexafluorophosphate(1-)
Inchi:	InChI=1S/C16H36N.F6P/c1-5-9-13-17(14-10-6-2,15-11-7-3)16-12-8-4;1-7(2,3,4,5)6/h5-1
InchiKey:	BKBKEFQIOUYLBC-UHFFFAOYSA-N
Formula:	C16H36F6NP
SMILES:	CCCC[N+](CCCC)(CCCC)CCCC.F[P-](F)(F)(F)(F)F
Mol. weight [g/mol]:	387.43
CAS:	3109-63-5

Physical Properties

Property code	Value	Unit	Source
tf	524.30	K	Solubility of non-aromatic hexafluorophosphate-based salts and ionic liquids in water determined by electrical conductivity
tf	344.15	K	Ion exchange synthesis and thermal characteristics of some [N+ 4444] based ionic liquids
tf	517.20 ± 0.50	K	NIST Webbook

Sources

Volumetric and compressibility behaviour of ionic liquid, 1-n-butyl-3-methylimidazolium hexafluorophosphate and tetrabutylammonium hexafluorophosphate in organic solvents at T = 298.15 K:	https://www.doi.org/10.1016/j.jct.2005.07.018
Ion exchange synthesis and thermal characteristics of some [N+ 4444] based ionic liquids	https://www.doi.org/10.1016/j.tca.2013.01.003
NIST Webbook, tf:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3109635&Units=SI
Ionic solvation of tetrabutylammonium hexafluorophosphate in pure nitromethane, 1,3-dioxolane and nitrobenzene. A comparative physicochemical study:	https://www.doi.org/10.1016/j.fluid.2011.11.002
Solubility of non-aromatic hexafluorophosphate-based salts and ionic liquids in water determined by electrical conductivity:	https://www.doi.org/10.1016/j.fluid.2013.07.061

Legend

tf: Normal melting (fusion) point