



>>Entry Name: Lithium hexafluorophosphate(V)

Synonym(s): Hexafluorophosphate, lithium salt. Hexafluorophosphate(1-), lithium salt, 8Cl

CAS Registry Number: 21324-40-3

LiPF₆

Molecular Formula: F₆LiP

Molecular Weight: 151.905

Accurate Mass: 151.980183

Percentage Composition: F 75.04%; Li 4.57%; P 20.39%

Source/Synthesis: Prepd. from LiF + PF₅ in Et₂O. Highly pure surface active material can be obtained by thermal dec. of [Li(MeCN)₄]PF₆ under anhydrous conditions

Use/Importance: Commercially available. Battery electrolyte component

Physical Description: White rhombohedral cryst.

Hazard & Toxicity: Irritant

Aldrich: 20114-6

Fluka: 62502

References:

Kemmitt, R.D.W. *et al.*, *J.C.S.*, 1963, 4408, (*struct*)

U.S. Pat., 1971, 3 607 015; *CA*, **75**, 119629, (*synth*)

U.S. Pat., 1975, 3 907 977; *CA*, 1976, **84**, 7178, (*synth*)

Burum, D.P. *et al.*, *J. Chem. Phys.*, 1978, **68**, 1164, (*F-19 nmr*)

Sigma-Aldrich Library of Chemical Safety Data, 1988, **2**, 2155D