

ZHENJIANG POWORKS CO., LTD.

Add: No.303 Yushan North Road, Jingkou District, Zhenjiang, China Tel: +86 511 8878 2196 Fax: +86 511 8878 2197

## **Technical Data Sheet**

Lithium Bis(trifluoromethanesulfonyl)imide, LiTFSI

Formula: (CF<sub>3</sub>SO<sub>2</sub>)<sub>2</sub>NLi

Relative weight: 287.08

CAS NO.: 90076-65-6

Physical Chemical Properties: White crystal or powder, often simply referred to as LiTFSI, chemical formula (CF3SO2)2NLi, formula weight 287.08, with its density 1.33 g/cm<sup>3</sup>, melting point 236 °C (457°F; 509K). It is highly soluble in water.

Applications: Commonly used as Li-ion source in electrolytes for Li-ion batteries as a safer alternative to work with or replace lithium hexafluorophosphate. It is made up of one Li cation and a bistriflimide anion. Because of its very high solubility in water (> 21 M), LiTFSI has been used as lithium salt in water-in-salt electrolytes for aqueous lithium-ion batteries.

Component		Lithium Bis(trifluoromethanesulfonyl)imide
(CF <sub>3</sub> SO <sub>2</sub> ) <sub>2</sub> NLi Content (Min%)		99.90%
Impurity Content Max ppm	H <sub>2</sub> O	200
	рН	6.0~9.0
	F-	20
	Cl⁻	15
	SO4 <sup>2-</sup>	20
	Chroma (25% MEK) Hazen	30
	Turbidity (25% MEK) NTU	10
	Al	1
	Ca	5
	Cu	1
	Fe	2
	K+	5
	Na <sup>+</sup>	10
	Mg	1
	Ni	1
	Pb	1
	Si	5
	Zn	1
Packing: 5kg/HDPE bottle in Sealed aluminum pouch with inert gas inside.		