

## Technical Data Sheet

Anhydrous lithium sulfate: LITHIUM SULFATE
Formula: $\text{Li}_2\text{SO}_4$
Relative molecular weight (Formula weight): 109.94
CAS NO: 10377-48-7
Physical-chemical Properties: Colorless crystal, losing its crystal water at 130°C (266°F), soluble in water, hardly soluble in alcohol, neutral in aqueous solution, specific gravity 2.06, melting point 860°C (1580°F).
Applications: Separation of calcium and magnesium. It has been tested as an additive for Portland cement and serves to speed up the hydration reaction which decreases the curing time. It is also researched as a potential component of ion conducting glasses and a new class of battery. Lithium sulfate is sometimes used as an alternative of lithium carbonate in psychiatry for the treatment of mania, endogenous depression, psychosis and also schizophrenia. Lithium sulfate has also been used as a catalyst in organic chemistry synthesis.
Quality standard:

Name		Lithium Sulfate		
Li <sub>2</sub> SO <sub>4</sub> Content (Min%)		99.0	99.9	99.99
Impurity Content (Max%)	Sodium ( Na )	0.05	0.01	0.001
	Potassium (K )	0.05	0.01	0.001
	Calcium (Ca )	0.03	0.01	0.001
	Magnesium (Mg)	0.005	0.001	0.001
	Iron (Fe)	0.005	0.001	0.001
	Heavy metals (in Pb)	0.001	0.001	0.001
	Chloride (Cl)	0.05	0.002	0.001
	Water insoluble matter	0.01	0.01	0.01
Packing: By three-in-one composite bag lined with plastic bag, 25kg/bag. By paper drum lined with plastic bags, 30kg/drum.				