

# Technical Data Sheet

Lithium Sulfate Monohydrate: LITHIUM SULFATE MONOHYDRATE
Formula: $\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O}$
Formula weight: 127.96
CAS NO.: 10102-25-7
Physical-chemical Properties: Colorless crystal, losing crystal water at temperature 130°C (266 °F), soluble in water, almost insoluble in alcohol, neutral in aqueous solution, specific gravity 2.06g/cm <sup>3</sup> , melting point 860°C (1580°F).
Applications: Separation of calcium and magnesium. It is also used in making high strength glass and potentially for ion conducting glasses. It is even used in pharmaceutical industry as an antidepressant.
Quality standard:

Component		Lithium Sulfate Monohydrate		
$\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O}$ Content (Min%)		99.0	99.9	99.99
Impurity Content (Max%)	Free acid (based on $\text{H}_2\text{SO}_4$ )	0.01	0.01	/
	Free base (based on $\text{Li}_2\text{CO}_3$ )	0.007	0.005	/
	Chloride (Cl )	0.005	0.002	0.0010
	Phosphate ( $\text{PO}_4$ )	0.001	/	/
	Sodium ( Na )	0.05	0.01	0.001
	Potassium ( K )	0.05	0.01	/
	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
	Water insolubles	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.				