

Technical Data Sheet

LITHIUM PERCHLORATE, ANHYDROUS
Formula: LiClO_4
Formula weight: 106.39
CAS NO.: 7791-03-9
Physical-chemical Properties: White crystal, density 2.428g/cm^3 , melting point 236°C (456.8°F), decomposition temperature 430°C (806°F), soluble in water, ethanol, ether and acetone. Solubility: $60\text{g}/100\text{g H}_2\text{O}$ (25°C), $150\text{g}/100\text{g H}_2\text{O}$ (89°C).
Application: Used in high temperature chemistry to provide oxygen, and used as an oxidant for rocket fuel, used in the battery industry to produce electrolyte for lithium battery.
Quality standards: Q/TJTE 4-2007

Component		LITHIUM PERCHLORATE, ANHYDROUS		
LiClO_4 Content (Min%)		99.0	99.5	99.0 (Industrial grade)
Impurity Content (Max%)	(Na)	0.002	0.002	0.01
	(K)	0.002	0.001	0.005
	(Ca)	0.003	0.002	0.01
	(Fe)	0.0005	0.0003	0.001
	Heavy metal (in Pb)	0.0002	0.0002	/
	(Cl)	0.002	0.002	0.02
	Chloride and chlorate	0.01	0.01	/
	(SO_4)	0.005	0.003	0.005
	(N)	0.003	0.003	/
	(H_2O)	0.5	0.5	0.5
	Water insolubles	0.008	0.008	/
Packing: By double-layer plastic bag vacuum heat shrinkable sealing, 2kg/bag, 14kg/carton. By woven bag lined with plastic bag, 25kg/bag. By paper drum lined with plastic bags, 30kg/drum.				