

	RM-SPECIFICATION Material : Lithium Chloride (LiCl) Item Code: Purpose : Electrolyte		DOCUMENT STATUS	
			REV	00
MATERIAL CODE:	C09	DOCUMENT NO.	1	

Sno	Description	UOM	Specification
1.	Physical State / Color	-	Solid Powder / White
2.	Assay Content	%	98
3.	Grade	-	AR
4.	Mol. Wt.	g/mol	42.39
5.	Element	%	Percentage
a.	Lithium (Li ⁺)	%	16.36
b.	Cl (Cl ⁻)	%	83.64
c.	Sulphates (SO ₄ ²⁻)	%	0.05
d.	Barium (Ba ²⁺)	%	0.002
e.	Iron (Fe)	%	0.002
f.	Calcium (Ca)	%	0.01
6.	Melting point	°C	605
7.	Boiling point	°C	1382
8.	Particle size distribution	µm	50 - 150
9.	Bulk density	kg/m ³	530
10.	Specific heat	J/ (kg K)	4243
11.	Supplier	-	Azaricta research labs
12.	MSDS no.	-	XXXX
13.	CAS no.	-	7447-41-8
14.	Acceptance Criteria		
a.	Assay Content (w.r.t Chloride)	%	98±1
b.	Visual Acceptance	-	White Solid Powder
c.	Melting Point	°C	605±2
d.	Eutectic Mixture (LiCl: KCl = 44:56) M. P	°C	352
15.	Properties to be tested	Test Method	Test Agency
a.	Assay Content (w.r.t Chloride)	Argentometric titration	RES/SRR
b.	Quantitative/Qualitative analysis	ICPMS	NABL, IIT-HYD, CMET
c.	Particle size distribution	Sieving & others	RES
d.	Specific heat, Melting point	DSC/TGA	NABL, IIT-HYD, CMET

PREPARED BY:		REVIEWED & APPROVED BY:
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RENEWABLE ENERGY SYSTEMS LIMITED