	RM-SPECIFICATION **Material :** Potassium Chloride (KCl) **Item Code:** **Purpose :** Electrolyte	DOCUMENT STATUS **DRAFT**
MATERIAL CODE:	C12 **DOCUMENT NO.**	2

Sno	Description	UOM	Specification
1	Physical State / Color	-	Solid Powder / White
2	Assay Content	%	97
4	Grade	-	ExcelR
5	Mol. Wt.	g/mol	74.55
6	**Element**	**%**	**Percentage**
a.	Potassium(K)	**%**	51 ± 0.1
b.	Chloride (Cl)	**%**	46 ± 0.2
c.	Sulphates	**%**	≤ 0.001
d.	Phosphates	PPM	≤ 5
e.	Iron	**%**	0.004
f.	Ca	**%**	≤ 0.001
7	Melting point	°C	770
8	Boiling point	°C	1420
9	Particle size distribution	µm	50 - 90
10	Specific heat	J/ (kg K)	693.7
11	Supplier		Madhava Lab chemicals
12	MSDS no.	-	XXX
13	CAS no.	-	7447-40-7
14	**Acceptance Criteria**		
a.	Assay Content (w.r.t Chloride)	%	97
b.	Visual Acceptance	-	White Solid Powder
c.	Melting Point	°C	770
d.	Boiling Point	°C	1420
e.	Eutectic Mixture (LiCl: KCl = 44:56) M.P	°C	352
15	**Properties to be tested**	**Test Method**	**Test Agency**
a.	Quantitative & qualitative analysis	ICPMS/Titration	NABL, IIT-HYD, CMET
b.	Particle size distribution	PSD	NABL, SRR labs
c.	Mechanical Properties (Pellet Strength)	NA	NA
d.	Specific heat & Thermal Conductivity	DSC/TGA	NABL, IIT-HYD, CMET

PREPARED BY:		REVIEWED & APPROVED BY:

RENEWABLE ENERGY SYSTEMS LIMITED