

	RM-SPECIFICATION		DOCUMENT STATUS
	Material : Magnesium Oxide (MgO) Item Code: Purpose : Electrolyte		DRAFT
MATERIAL CODE:	C32	DOCUMENT NO.	3
Sno	Description	UOM	Specification
1	Physical State / Color	-	Solid Powder / White
2	Assay Content (w.r.t MgO)	%	97
4	Grade	-	Extra Pure
5	Mol. Wt.	g/mol	40.03
6	Element & Its Percentages.	%	Percentage
a.	SO <sub>3</sub>	%	≤ 1
b.	Acid Insoluble Matter	%	≤ 0.1
c.	Calcium (Ca)	%	≤ 1.1
d.	Heavy metal (Pb)	%	≤ 0.002
e.	Iron (Fe)	%	≤ 0.05
f.	Residual Solvents	%	Complies
7	Melting point	°C	2852
8	Boiling point	°C	3600
9	Particle size distribution	µm	50 - 90
10	Surface area	m/g	133
11	Bulk density	kg/m <sup>3</sup>	550
12	Specific heat	J/ (kg K)	0.928
13	Supplier	-	Elegance Scientific
14	MSDS no.	-	XXX
15	CAS no.	-	1309-48-4
16	Acceptance Criteria		
a.	Assay Content	%	97±1
b.	Visual Acceptance	-	White Solid Powder
c.	Specific Heat	J/ (kg K)	0.928
d.	Melting point	°C	2852±2
17	Properties	Test Method	Test Agency
a.	Quantitative & qualitative analysis	ICPMS/XRD	NABL, IIT-HYD, CMET
b.	Particle size distribution	Sieving & others	RES
c.	Specific heat & Thermal Conductivity	DSC/TGA	NABL, IIT-HYD, CMET
PREPARED BY:		REVIEWED & APPROVED BY:	
RENEWABLE ENERGY SYSTEMS LIMITED			