

	<b>RM-SPECIFICATION</b>		DOCUMENT STATUS
	<b>Material : Potassium Perchlorate (KClO<sub>4</sub>)</b> <b>Item Code:</b> <b>Purpose : Heat Pellet</b>		<b>DRAFT</b>
<b>MATERIAL CODE:</b>	C26	<b>DOCUMENT NO.</b>	10

  

S.no	Description	UOM	Specification
1.	Physical State / Color	-	Solid Powder / White
2.	Assay Content	%	98
3.	Grade	-	XXX
4.	Mol. Wt.	g/mol	138.55
5.	<b>Element</b>	<b>%</b>	<b>Percentage</b>
a.	Potassium (K <sup>+</sup> )	%	27.8
b.	Chlorine (Cl <sup>+7</sup> )	%	24.4
c.	Oxygen (O <sup>2-</sup> )	%	46.19
6.	Melting point	°C	400
7.	Particle size distribution	µm	30 - 140
8.	Bulk density	kg/m <sup>3</sup>	1150
9.	Burning Speed (Fe: KClO <sub>4</sub> = 87:13)	mm/sec	138
10.	Calorific Value (Fe: KClO <sub>4</sub> = 87:13)	cal/g	260
11.	Supplier	-	Nano Research Lab
12.	MSDS no.	-	XXXX
13.	CAS no.	-	7778-74-7
14.	<b>Acceptance Criteria</b>		
a.	Visual Acceptance	-	Solid White Powder
b.	Assay Content	%	98 ± 1
c.	Melting point	°C	400 ± 2
d.	Burning Speed (Fe: KClO <sub>4</sub> = 87:13)	mm/sec	138±2
e.	Calorific Value (Fe: KClO <sub>4</sub> = 87:13)	cal/g	260±2
15.	<b>Properties to be tested</b>	<b>Test Method</b>	<b>Test Agency</b>
a.	Quantitative & qualitative analysis	ICPMS/XRD	NABL, IIT-HYD, CMET
b.	Particle size distribution	Sieving & Others	RES, NABL, SRR labs
c.	Specific heat & Thermal Conductivity	DSC/TGA	NABL, IIT-HYD, CMET

  

PREPARED BY:		REVIEWED & APPROVED BY:
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<b>RENEWABLE ENERGY SYSTEMS LIMITED</b>
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