

	RM-SPECIFICATION		DOCUMENT STATUS
	Material : Iron Powder (Fe) Item Code: Purpose : Heat Pellet		DRAFT
MATERIAL CODE:	C28	DOCUMENT NO.	7

Sno	Description	UOM	Specification
1.	Physical State / Color	-	Powder /Greyish Brown
2.	Assay Content	%	98
3.	Grade		XXX
4.	Mol. Wt.	g/mol	56
5.	Element	%	Percentage
a.	Total iron content	%	98
b.	Metal iron content (Fe)	%	≥ 97
6.	Melting point	°C	1535
7.	Particle size distribution	µm	2 – 30
8.	Bulk density	kg/m ³	2380
9.	Burning Speed (Fe: KClO ₄ = 87:13)	mm/sec	138
10.	Specific heat	J/ (g °C)	0.451
11.	Calorific value (Fe: KClO ₄ = 87:13)	Cal/gm	260
12.	Supplier		Gelon Energy Corp
13.	MSDS no.	-	XXX
14.	CAS no.	-	7439-89-6
15.	Acceptance Criteria		
a.	Visual Acceptance	-	Greyish brown powder
b.	Assay Content	%	97 ± 1
c.	Melting point	°C	1535 ± 2
d.	Burning Speed (Fe: KClO ₄ = 87:13)	mm/sec	138 ±2
e.	Calorific value (Fe: KClO ₄ = 87:13)	Cal/gm	260 ±2
16.	Properties	Test Method	Test Agency
a.	Quantitative & qualitative analysis	ICPMS/ED-XRF	NABL, IIT-HYD, CMET
b.	Particle size distribution	PSD & Sieving	RES, NABL, SRR labs
c.	Specific heat & Thermal Conductivity	DSC/TGA	NABL, IIT-HYD, CMET

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