

Energy Peat (Sphagnum) Reference Material

Art. ID	NJV-94-2
Unit	50g vial
Deliverydetails	No Dangerous Good /not restricted

Description

This Reference Material is intended for use in the control of instruments and methods in energy parameter and elemental analysis of energy peat / The reference material consists of milled peat from Rönjorets peat winning area, Västerbotten, Sweden

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified value	Ash		1,57 ± 0,042	%	SS 18 71 7 1 / ISO 11 71 (500 oC)) / Leco-M AC 400 (55 0 oC)	
Certified value	Calorific Value		22,03 ± 0,045	MJ/kg	SS 18 71 8 2 / ISO 19 28 / DIN 5 1900 / AST M D 3286	
Certified value	Nitrogen (N)	[7727-37-9]	1,1 ± 0,045	%	CHN-analyz er / Kjeld ahl	
Certified value	Sulfur (S)	[7704-34-9]	0,217 ± 0,0080	%	SS 18 71 7 6 / SS 18 71 77 / AS TM D 4239 / Nefelome try	
Certified value	Chlorine (Cl)	[7782-50-5]	0,061 ± 0,0078	%	SS 18 71 5 4 / ASTM D 2361 / AS TM D 4208 with Ion C hromatogra phy	
Certified value	Phosphorus (P)	[7723-14-0]	0,024 ± 0,0030	%	Colorimetr	

					y / ICP-AE S / XRF
Certified value	Aluminium (Al)	[7429-90-5]	0,095 ± 0,010	%	FAAS / ICP -AES / XRF
Certified value	Calcium (Ca)	[7440-70-2]	0,12 ± 0,011	%	FAAS / ICP -AES / XRF
Certified value	Iron (Fe)	[7439-89-6]	0,13 ± 0,014	%	FAAS / ICP -AES / XRF
Certified value	Magnesium (Mg)	[7439-95-4]	0,11 ± 0,011	%	FAAS / ICP -AES / XRF
Certified value	Manganese (Mn)	[7439-96-5]	0,0008 ± 0,00016	%	FAAS / ICP -AES / XRF
Certified value	Cadmium (Cd)	[7440-43-9]	0,16 ± 0,023	mg/kg	GFAAS / IC P-MS
Certified value	Copper (Cu)	[7440-50-8]	1,7 ± 0,20	mg/kg	FAAS / GFA AS / ICP-M S
Certified value	Lead (Pb)	[7439-92-1]	10,1 ± 0,82	mg/kg	GFAAS / IC P-MS
Certified value	Zinc (Zn)	[7440-66-6]	9 ± 1,4	mg/kg	FAAS / ICP -AES
Information value	Volatile matter		69,9 ± 0,35	%	SS-ISO 562 / ISO 562 / DIN 517 20
Information value	Carbon (C)	[7440-44-0]	55,3 ± 0,79	%	CHN-analyz er
Information value	Hydrogen (H)	[1333-74-0]	5,8 ± 0,40	%	CHN-analyz er
Information value	Potassium (K)	[7440-09-7]	0,017 ± 0,0057	%	FAAS / FAE S / ICP-AE S / XRF
Information value	Silicon (Si)	[7440-21-3]	0,28 ± 0,049	%	FAAS / ICP -AES / XRF
Information value	Sodium (Na)	[7440-23-5]	0,019 ± 0,0064	%	FAAS / FAE S / ICP-AE S / XRF
Information value	Chromium (Cr)	[7440-47-3]	1,1 ± 0,35	mg/kg	FAAS / GFA

					AS / ICP-M
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Information value	Titanium (Ti)	[7440-32-6]	75 ± 31	mg/kg	GFAAS / IC P-AES / XR F