

Wood Fuel Reference Material

Art. ID	NJV-94-5
Unit	50g bottle
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 wood fuel / The reference material consists of waste from a saw mill, Bygdsiljum, Västerbotten, Sweden

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified value	Ash		1,22 ± 0,040	%	SS 18 71 7 1 / ISO 11 71 (500 oC)) / Leco-M AC 400 (55 0 oC)	
Certified value	Calorific Value		20,6 ± 0,15	MJ/kg	SS 18 71 8 2 / ISO 19 28 / DIN 5 1900 / AST M D 3286	
Certified value	Sulfur (S)	[7704-34-9]	0,018 ± 0,0039	%	SS 18 71 7 6 / SS 18 71 77 / AS TM D 4239 / Nefelome try	
Certified value	Phosphorus (P)	[7723-14-0]	0,021 ± 0,0028	%	Colorimetr y / ICP-AE S / XRF	
Certified value	Aluminium (Al)	[7429-90-5]	0,026 ± 0,0032	%	FAAS / ICP -AES / XRF	
Certified value	Calcium (Ca)	[7440-70-2]	0,35 ± 0,022	%	FAAS / ICP -AES / XRF	
Certified value	Iron (Fe)	[7439-89-6]	0,007 ± 0,0016	%	FAAS / ICP -AES / XRF	
Certified value	Magnesium (Mg)	[7439-95-4]	0,03 ± 0,0018	%	FAAS / ICP -AES / XRF	

Certified value	Manganese (Mn)	[7439-96-5]	0,021 ± 0,0038	%	FAAS / ICP -AES / XRF
Certified value	Potassium (K)	[7440-09-7]	0,09 ± 0,017	%	FAAS / FAE S / ICP-AE S / XRF
Certified value	Sodium (Na)	[7440-23-5]	0,004 ± 0,0012	%	FAAS / FAE S / ICP-AE S / XRF
Certified value	Arsenic (As)	[7440-38-2]	0,8 ± 0,24	mg/kg	AAS-hybrid e generati on / GFAAS / ICP-MS
Certified value	Cadmium (Cd)	[7440-43-9]	0,27 ± 0,028	mg/kg	GFAAS / IC P-MS
Certified value	Chromium (Cr)	[7440-47-3]	0,8 ± 0,30	mg/kg	FAAS / GFA AS / ICP-M S
Certified value	Copper (Cu)	[7440-50-8]	2,2 ± 0,30	mg/kg	FAAS / GFA AS / ICP-M S
Certified value	Lead (Pb)	[7439-92-1]	0,68 ± 0,025	mg/kg	GFAAS / IC P-MS
Certified value	Zinc (Zn)	[7440-66-6]	38 ± 8,5	mg/kg	FAAS / ICP -AES
Information value	Volatile matter		79,2 ± 0,60	%	SS-ISO 562 / ISO 562 / DIN 517 20
Information value	Carbon (C)	[7440-44-0]	51,7 ± 0,33	%	CHN-analyz er
Information value	Hydrogen (H)	[1333-74-0]	6,04 ± 0,082	%	CHN-analyz er
Information value	Nitrogen (N)	[7727-37-9]	0,17 ± 0,050	%	CHN-analyz er / Kjeld ahl
Information value	Chlorine (Cl)	[7782-50-5]	0,01 ± 0,0036	%	SS 18 71 5 4 / ASTM D 2361 / AS

					TM D 4208 with Ion C hromatogra phy
Information value	Silicon (Si)	[7440-21-3]	0,023 ± 0,0037	%	FAAS / ICP -AES / XRF
Information value	Titanium (Ti)	[7440-32-6]	2,4 ± 0,44	mg/kg	GFAAS / IC P-AES / XR F