

Karelian Paju

Handout of Karelian Paju biochar Eurofins EBC-laboratory test packet. Key values:

- Surface area**
ad. 550 m²/g (BET)*
- Carbon content**
ad. 95,2 %
- Water retention capacity**
650 %
- PAH compounds and heavy metals**
Below the limit values, also with recycled wood.

*University of Eastern Finland laboratory analysis



Summary of test results		
	EBC - FeedPlus limit value (most strict)	Karelian Paju Biochar
H/Corg	< 0.4	0,12-0,2
Pb	10 g t-1 DM	< 0,01-6 g t-1 DM
Cd	0,8 g t-1 DM	< 0,2 g t-1 DM
Cu	70 g t-1 DM	2-7 g t-1 DM
Ni	25 g t-1 DM	1 g t-1 DM
Hg	0,1 g t-1 DM	< 0,07 g t-1 DM
Zn	200 g t-1 DM	13-40 g t-1 DM
Cr	70 g t-1 DM	13-22 g t-1 DM
As	2 g t-1 DM	0,8-2 g t-1 DM
16 EPA PAH	6 ± 2,4 g t-1 DM	1,3-1,6 g t-1 DM
8 EFSA PAH	1,0 g t-1 DM	N/A*
benzo[e]pyrene benzo[j]fluoranthene	< 1.0 g t-1 DM	< 0,1

*Not detected in Eurofins EBC-tests

											Description		Karelian Paju Oy, Biohiilinäyte, Näyte 1, Raaka-ainan Purkupuuh A, Pyrolyysilämpötila (keskiarvo) 650 °C, Viipymä (minimi) 1 tunti	
											Customer Reference		748-2024-00006145	
											Sample number		124094371	
Limit values														
Parameter	Lab	Accr.	Method	1) EBC- FeedPlus	2) EBC- Feed	3) EBC- Agro Organic	4) EBC- Agro	5) EBC- Urban	6) EBC- Con- sumer Materials	7) EBC- Basic Materials	LOQ	Unit	ar	db
Biochar properties														
Bulk density < 3 mm	FR		based on VDLUFA-Methode A 13.2.1									kg/m ³	-	107
water holding capacity (WHC) < 2 mm	FR		DIN EN ISO 14238, A: 2014-03									%	-	657.1
Moisture	FR	F5	DIN 51718: 2002-06								0.1	% (w/w)	20.3	-
Ash content (550°C)	FR	F5	DIN 51719: 1997-07								0.1	% (w/w)	1.4	1.8
Total carbon	FR	F5	DIN 51732: 2014-07								0.2	% (w/w)	75.9	95.2
carbon (organic)	FR		Calculation									% (w/w)	75.7	94.9
Hydrogen	FR	F5	DIN 51732: 2014-07								0.1	% (w/w)	0.9	1.1
Total nitrogen	FR	F5	DIN 51732: 2014-07								0.05	% (w/w)	0.32	0.40
Sulphur (S), total	FR	F5	DIN 51724-3: 2012-07								0.03	% (w/w)	< 0.03	< 0.03
Oxygen	FR	F5	DIN 51733: 2016-04									% (w/w)	1.5	1.8
Total inorganic carbon (TIC)	FR	F5	DIN 51726: 2004-06								0.1	% (w/w)	0.2	0.3
carbonate-CO2	FR	F5	DIN 51726: 2004-06								0.4	% (w/w)	0.9	1.1
H/C ratio (molar)	FR		Calculation										0.14	0.14
H/Corg ratio (molar)	FR		Calculation	< 0.4	< 0.4	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7			0.14	0.14
O/C ratio (molar)	FR		Calculation										0.015	0.014
pH in CaCl2	FR		DIN ISO 10390: 2005-12										8.4	-
salt content	FR		BGK III. C2: 2006-09								0.005	g/kg	2.45	-
salt content	FR		BGK III. C2: 2006-09								0.005	g/l	0.262	-

Parameter	Lab	Accr.	Method	Limit values							LOQ	Unit	Description		
				1) EBC-FeedPlus	2) EBC-Feed	3) EBC-Agro Organic	4) EBC-Agro	5) EBC-Urban	6) EBC-Consumer Materials	7) EBC-Basic Materials			Customer Reference	Sample number	
Conductivity at 1,2 t pressure	FR		Internal Method SAA-H-Lf-Pflanzenkohle.040								0.01	mS/cm	-	510	Karelian Paju Oy, Biohiilinäyte, Näyte 1, Raaka-ainaa Purkupuuh A, Pyrolyysilämpötila (keskiarvo) 650 °C, Viipymä (minimi) 1 tunti
Conductivity at 2 t pressure	FR		Internal Method SAA-H-Lf-Pflanzenkohle.040								0.01	mS/cm	-	640	748-2024-00006145
Conductivity at 3 t pressure	FR		Internal Method SAA-H-Lf-Pflanzenkohle.040								0.01	mS/cm	-	730	124094371
Conductivity at 4 t pressure	FR		Internal Method SAA-H-Lf-Pflanzenkohle.040								0.01	mS/cm	-	820	
Conductivity at 5 t pressure	FR		Internal Method SAA-H-Lf-Pflanzenkohle.040								0.01	mS/cm	-	830	

											Description		Karelian Paju Oy, Biohiilinäyte, Näyte 1, Raaka-ainapurkupu A, Pyrolyysilämpötila (keskiarvo) 650 °C, Viipymä (minimi) 1 tunti	
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Limit values														
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Elements from the micro wave pressure digestion acc. to DIN 22022-1: 2014-07														
Arsenic (As)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01			13	13	13	13		0.8	mg/kg	-	< 0.8
Lead (Pb)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01			45	120	120	120		2	mg/kg	-	5
Cadmium (Cd)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01			0.7	1.5	1.5	1.5		0.2	mg/kg	-	< 0.2
Copper (Cu)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01	70	70	70	100	100	100		1	mg/kg	-	2
Nickel (Ni)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01	25	25	25	50	50	50		1	mg/kg	-	1
Mercury (Hg)	FR	F5	DIN 22022-4: 2001-02			0.4	1	1	1		0.07	mg/kg	-	< 0.07
Zinc (Zn)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01	200	200	200	400	400	400		1	mg/kg	-	13
Chromium (Cr)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01	70	70	70	90	90	90		1	mg/kg	-	22
Boron (B)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01								1	mg/kg	-	2
Manganese (Mn)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01								1	mg/kg	-	120
Silver (Ag)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01								5	mg/kg	-	< 5

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Limit values														
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Elements fr. the borate digestion of ash 550 °C acc. to DIN 51729-11:1998-11(AR)														
Calcium as CaO	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	30.2
Iron as Fe ₂ O ₃	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	6.2
Potassium as K ₂ O	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	9.1
Magnesium as MgO	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	6.5
Sodium as Na ₂ O	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	2.4
Phosphorus as P ₂ O ₅	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	1.1
sulphur as SO ₃	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	1.3
Silicon as SiO ₂	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	12.8
Macronutrients														
Total nitrogen	FR	F5	DIN 51732: 2014-07								0.5	g/kg	3.2	4.0

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				1) EBC- FeedPlus	2) EBC- Feed	3) EBC- Agro Organic	4) EBC- Agro	5) EBC- Urban	6) EBC- Con- sumer Materials	7) EBC- Basic Materials				
Macronutrients-LiBO2/Li2B4O7/LiBr-melt of ash 550°C [DIN 51729-11:1998-11] (OS)														
Phosphorus as P2O5	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	0.2
Potassium as K2O	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	1.7
Calcium as CaO	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	5.5
Magnesium as MgO	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	1.2
Sodium as Na2O	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	0.4
sulphur as SO3	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	0.2
Elements fr. the borate digestion of ash 550°C acc. to DIN 51729-11:1998-11(OS)														
Iron (Fe)	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	0.8
Silicon (Si)	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	1.1
Organic contaminants from toluene extraction acc. to EN 17503 (method 10.2.3)														
Naphthalene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	1.1
Acenaphthylene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Acenaphthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Fluorene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Phenanthrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	0.5
Anthracene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1

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Fluoranthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Pyrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benz(a)anthracene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Chrysene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benzo(b)fluoranthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benzo(k)fluoranthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benzo(a)pyrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Indeno(1,2,3-cd)pyrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Dibenz(a,h)anthracene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benzo(g,h,i)perylene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Total 8 EFSA-PAH excl. LOQ	FR		calculated	1	1	1	1	1	1	4		mg/kg	-	(n. c.) ¹⁾
Total 16 EPA-PAH excl. LOQ	FR		calculated	6 ²⁾		6 ²⁾	6 ²⁾					mg/kg	-	1.6
Benzo(e)pyrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.1	mg/kg	-	< 0.1
Benzo-(j)-fluoranthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.1	mg/kg	-	< 0.1

											Description		Karelian Paju Oy, Biohiilinäyte, Näyte 2, Raaka-ainapurkupu B, Pyrolyysilämpötila (keskiarvo) 650 °C, Viipymä (minimi) 1 tunti	
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Parameter	Lab	Accr.	Method	1) EBC- FeedPlus	2) EBC- Feed	3) EBC- Agro Organic	4) EBC- Agro	5) EBC- Urban	6) EBC- Con- sumer Materials	7) EBC- Basic Materials	LOQ	Unit	ar	db
Biochar properties														
Bulk density < 3 mm	FR		based on VDLUFA-Methode A 13.2.1									kg/m ³	-	156
water holding capacity (WHC) < 2 mm	FR		DIN EN ISO 14238, A: 2014-03									%	-	377.1
Moisture	FR	F5	DIN 51718: 2002-06								0.1	% (w/w)	24.1	-
Ash content (550°C)	FR	F5	DIN 51719: 1997-07								0.1	% (w/w)	2.6	3.5
Total carbon	FR	F5	DIN 51732: 2014-07								0.2	% (w/w)	69.7	91.9
carbon (organic)	FR		Calculation									% (w/w)	69.4	91.5
Hydrogen	FR	F5	DIN 51732: 2014-07								0.1	% (w/w)	1.0	1.3
Total nitrogen	FR	F5	DIN 51732: 2014-07								0.05	% (w/w)	1.00	1.32
Sulphur (S), total	FR	F5	DIN 51724-3: 2012-07								0.03	% (w/w)	0.03	0.04
Oxygen	FR	F5	DIN 51733: 2016-04									% (w/w)	2.1	2.7
Total inorganic carbon (TIC)	FR	F5	DIN 51726: 2004-06								0.1	% (w/w)	0.3	0.4
carbonate-CO2	FR	F5	DIN 51726: 2004-06								0.4	% (w/w)	1.2	1.6
H/C ratio (molar)	FR		Calculation										0.16	0.16
H/Corg ratio (molar)	FR		Calculation	< 0.4	< 0.4	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7			0.16	0.16
O/C ratio (molar)	FR		Calculation										0.023	0.022
pH in CaCl2	FR		DIN ISO 10390: 2005-12										8.6	-
salt content	FR		BGK III. C2: 2006-09								0.005	g/kg	3.47	-
salt content	FR		BGK III. C2: 2006-09								0.005	g/l	0.541	-

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Conductivity at 1,2 t pressure	FR		Internal Method SAA-H-Lf-Pflanzen- kohle.040								0.01	mS/cm	-	290				
Conductivity at 2 t pressure	FR		Internal Method SAA-H-Lf-Pflanzen- kohle.040								0.01	mS/cm	-	380				
Conductivity at 3 t pressure	FR		Internal Method SAA-H-Lf-Pflanzen- kohle.040								0.01	mS/cm	-	450				
Conductivity at 4 t pressure	FR		Internal Method SAA-H-Lf-Pflanzen- kohle.040								0.01	mS/cm	-	520				
Conductivity at 5 t pressure	FR		Internal Method SAA-H-Lf-Pflanzen- kohle.040								0.01	mS/cm	-	560				

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Elements from the micro wave pressure digestion acc. to DIN 22022-1: 2014-07														
Arsenic (As)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01			13	13	13	13		0.8	mg/kg	-	2.0
Lead (Pb)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01			45	120	120	120		2	mg/kg	-	6
Cadmium (Cd)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01			0.7	1.5	1.5	1.5		0.2	mg/kg	-	< 0.2
Copper (Cu)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01	70	70	70	100	100	100		1	mg/kg	-	7
Nickel (Ni)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01	25	25	25	50	50	50		1	mg/kg	-	< 1
Mercury (Hg)	FR	F5	DIN 22022-4: 2001-02			0.4	1	1	1		0.07	mg/kg	-	< 0.07
Zinc (Zn)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01	200	200	200	400	400	400		1	mg/kg	-	40
Chromium (Cr)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01	70	70	70	90	90	90		1	mg/kg	-	13
Boron (B)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01								1	mg/kg	-	4
Manganese (Mn)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01								1	mg/kg	-	129
Silver (Ag)	FR	F5	DIN EN ISO 17294-2 (E29): 2017-01								5	mg/kg	-	< 5

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Elements fr. the borate digestion of ash 550 °C acc. to DIN 51729-11:1998-11(AR)														
Calcium as CaO	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	25.6
Iron as Fe ₂ O ₃	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	6.0
Potassium as K ₂ O	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	7.0
Magnesium as MgO	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	4.8
Sodium as Na ₂ O	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	6.6
Phosphorus as P ₂ O ₅	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	1.4
sulphur as SO ₃	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	2.1
Silicon as SiO ₂	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	% (w/w)	-	17.1
Macronutrients														
Total nitrogen	FR	F5	DIN 51732: 2014-07								0.5	g/kg	10.0	13.2

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Macronutrients-LiBO2/Li2B4O7/LiBr-melt of ash 550°C [DIN 51729-11:1998-11] (OS)														
Phosphorus as P2O5	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	0.5
Potassium as K2O	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	2.4
Calcium as CaO	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	8.9
Magnesium as MgO	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	1.7
Sodium as Na2O	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	2.3
sulphur as SO3	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	0.7
Elements fr. the borate digestion of ash 550°C acc. to DIN 51729-11:1998-11(OS)														
Iron (Fe)	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	1.5
Silicon (Si)	FR	F5	DIN EN ISO 11885 (E22): 2009-09								0.1	g/kg	-	2.8
Organic contaminants from toluene extraction acc. to EN 17503 (method 10.2.3)														
Naphthalene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	1.0
Acenaphthylene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Acenaphthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Fluorene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Phenanthrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	0.3
Anthracene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1

											Description		Karelian Paju Oy, Biohiilinäyte, Näyte 2, Raaka-ainapurkupu B, Pyrolyysilämpötila (keskiarvo) 650 °C, Viipymä (minimi) 1 tunti	
											Customer Reference		748-2024-00006146	
											Sample number		124094372	
				Limit values										
Parameter	Lab	Accr.	Method	1) EBC- FeedPlus	2) EBC- Feed	3) EBC- Agro Organic	4) EBC- Agro	5) EBC- Urban	6) EBC- Con- sumer Materials	7) EBC- Basic Materials	LOQ	Unit	ar	db
Fluoranthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Pyrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benz(a)anthracene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Chrysene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benzo(b)fluoranthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benzo(k)fluoranthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benzo(a)pyrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Indeno(1,2,3-cd)pyrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Dibenz(a,h)anthracene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Benzo(g,h,i)perylene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08								0.1	mg/kg	-	< 0.1
Total 8 EFSA-PAH excl. LOQ	FR		calculated	1	1	1	1	1	1	4		mg/kg	-	(n. c.) ¹⁾
Total 16 EPA-PAH excl. LOQ	FR		calculated	6 ²⁾		6 ²⁾	6 ²⁾					mg/kg	-	1.3
Benzo(e)pyrene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.1	mg/kg	-	< 0.1
Benzo-(j)-fluoranthene	FR	F5	DIN EN 17503, Verfahren 10.2.3: 2022-08	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.1	mg/kg	-	< 0.1

Explanations

LOQ - Limit of quantification

ar - as received

db - dry basis

Lab - Abbreviation of the performing laboratory

Accr. - Abbreviation of the accreditation of the performing laboratory

Comments for results

¹⁾ not calculable

The parameters identified by FR have been performed by the laboratory Eurofins Umwelt Ost GmbH (Lindenstraße 11, Gewerbegebiet Freiberg Ost, Bobritzsch-Hilbersdorf). The accreditation code F5 identifies the parameters accredited according to DIN EN ISO/IEC 17025:2018 DAkkS D-PL-14081-01-00 .

Explanations regarding Limits

Analysis performed according to guidelines for a sustainable production of biochar - EBC, Version 10.3E - of 05/04/2023.

AR: related to ash

OS: related to original substance

²⁾ The very low PAH limit values only allow an analytical accuracy of 40% for the limit value: "sum 16 EPA-PAH" of 6 mg/kg which implies an accuracy of ± 2.4 mg/kg db, respectively.

The presentation of comparative values in the analytical report is a service provided by EUROFINS UMWELT. The cited comparative values (limit, guideline or other allocation values) are partially simplified and do not take into account all comments, ancillary provisions and/or exemptions of the corresponding regulations.

Comparison with comparative values

The comparison refers solely to the results reported in AR-24-FR-040144-01 and is based on a purely numerical comparison of the obtained measured value with the corresponding comparative values. The measurement uncertainty of the corresponding method is not taken into account.

The samples contained in the analytical report AR-24-FR-040144-01 do not show any exceedance or violation of a comparative value of the list guidelines for a sustainable production of biochar - EBC, Version 10.3E - of 05/04/2023. The investigating body is not responsible for determining the measures to be derived from the comparative value comparison.