Quality Parameters for Sphagnum Peat (RAL-GZ 250/5-2)

	Quality Parameters		Range of Values				
	Type of peat		**1**	**2**	**3**	**4**	**5**
1	**Physical properties**						
1.1	Degree of decomposition according to von POST		H2-H4	H3-H5	H4-H6	H5-H7	H6-H8
	Assessment of degree of decomposition		weakly decomposed	weakly-moderately decomposed	moderately decomposed	moderately - strongly decomposed	strongly decomposed
1.2	Water capacity of organic content	[g/100 g]	≥ 900	≥ 700 - 900	≥ 550 - 700	≥ 400 - 550	≥ 350 - 400
1.3	Bulk density (dry)	[g/l]	to be analyzed				
1.4	Dry matter	[weight %]	to be analyzed				
2	**Chemical properties**						
2.1	pH value		≤ 4.0 ($CaCl_2$ suspension)			≤ 4.5 (water suspension)	
2.2	Salinity	[g/l]	≤ 0.5				
	Alternative: electrical conductivity	[mS/cm]	≤ 0.175 (extraction ratio 1+3.6)		≤ 0.50 (extraction ratio 1+1.5)		
2.3	Soluble nutrients [1)]						
2.3.1	Nitrogen (NH_4-N+NO_3N)	[mg/l]	≤ 50				
2.3.2	Phosphorus (P_2O_5)	[mg/l]	≤ 30 (CAT extract)		≤ 50 (CAL extract)		
2.3.3	Potassium (K_2O)	[mg/l]	≤ 40 (CAT extract)		≤ 50 (CAL extract)		
2.4	Organic content	[% DM]	≥ 90				
2.5	Total content of heavy metals						
2.5.1	Arsenic (As)	[mg/kg DM]	≤ 40				
2.5.2	Lead (Pb)	[mg/kg DM]	≤ 150				
2.5.3	Cadmium (Cd)	[mg/kg DM]	≤ 1.5				
2.5.4	Chromium (Cr)	[mg/kg DM]	≤ 300				
2.5.5	Nickel (Ni)	[mg/kg DM]	≤ 80				
2.5.6	Mercury (Hg)	[mg/kg DM]	≤ 1				
2.5.7	Thallium (Tl)	[mg/kg DM]	≤ 1				
3	**Biological properties**						
3.1	Plant damaging substances		no plant damaging effect				
3.2	Weed content		max. 1 germinating seed or sprouting plant / l of peat				
4	**Other requirements**						
4.1	Impurities > 2 mm (e.g. plastics, metal or glas)		none				
4.2	Stones > 10 mm		none				
4.3	Foreign odour		without foreign odour				
4.4	The temperature must be controlled during storage At temperatures > 35 °C suitable measures are to be taken in order to prevent further heating-up At temperatures > 40 °C the peat is no longer suitable as a growing media constituent						
5	**On initiative by the Quality Committee**						
	Additional parameters that are not analysed frequently can be specified in a given case by the quality commission in consultation with the testing organisations involved.						
	Declaration [2)]						
	Material		Sphagnum peat				
	Type of peat		1 - 5				
	production plant / provenance						

1) The nutrient contents must be declared if they are above the respective reference values.

2) The requirements concerning the Fertiliser Ordinance must be taken into account.