

Material: Intensive Lightweight Topsoil
Source: Bourne Amenity Ltd
Date Tested: August 2017
Tested Against: BS3882:2015 Multipurpose Grade
Tested By: NRM Laboratories (Report 67586-17) and STRI (Report RS1067331[2])

Parameter	Unit	BS3882:2015 Multipurpose Range	Result	Compliance
Texture:				
Clay (<0.002mm)	% w/w	5 - 30%	10	Yes
Silt (0.002 - 0.63mm)	% w/w	0 - 65%	12	Yes
Sand (0.05 - 2.0mm)	% w/w	20 - 90%	78	Yes
Textual Class:				
Sandy Loam				
Stones (2 - 20mm)	% w/w DW	0 - 30%	1.5	Yes
Stones (20-50mm)	% w/w DW	0 - 10%	0.0	Yes
Stones (>50mm)	% w/w DW	0%	0.0	Yes
Sand Fraction (USGA Sieve Sizes):				
Very Fine Sand (0.05 - 0.15mm)	% w/w	n/a	8	--
Fine Sand (0.15 - 0.25mm)	% w/w	n/a	12	--
Medium Sand (0.25 - 0.50mm)	% w/w	n/a	15	--
Coarse Sand (0.50 - 1.0mm)	% w/w	n/a	15	--
Very Coarse Sand (1.0 - 2.0mm)	% w/w	n/a	28	--
Organic Matter (LOI)	% w/w	3.0 - 20.0	7.7	Yes
Ph		5.5 - 8.5	8.3	Yes
Exchangeable Sodium Percentage	%	< 15%	4.9	Yes
Phytotoxic Contaminants:				
Total Zinc	mg/kg	< 300	87.1	Yes
Total Copper	mg/kg	< 200	26	Yes
Total Nickel	mg/kg	< 180	20.7	Yes
Available Nutrients:				
Nitrogen	mg/l	>0.15	0.31	Yes
Phosphorus	mg/l	16 - 140	40	Yes
Potassium	mg/l	121 - 1500	1107	Yes
Magnesium	mg/l	51 - 600	117	Yes
Carbon:Nitrogen Ratio	:1	< 20:1	14.19	Yes
Calcium Carbonate	% m/m	n/a	2.8	--
Additional Analysis:				
Electrical Conductivity (1:2.5 water extract)	µS/cm	1500	1500	Yes
Electrical Conductivity (1:2 CaSO4 extract)	µS/cm	3300	2832	Yes
Bulk Density when oven dried	g/m ³	n/a	0.87	--
Calculated Bulk Density at 10% VMC	g/m ³	n/a	0.98	--
Bulk Density at Field Capacity	g/m ³	n/a	1.33	--
Calculated Bulk Density at Saturation	g/m ³	n/a	1.42	--
Particle Density	g/m ³	n/a	1.65	--
Field Capacity	% v/v	n/a	50.8	--
Total Porosity	%	n/a	52.6	--
Porosity at Field Capacity	%	n/a	44.2	--
Effective Porosity	%	n/a	8.5	--
Saturated Hydraulic Conductivity	mm/hr	n/a	36	--
Visible Contaminants:				
Plastics (>2.0mm)	% w/w	< 0.5	0.0	Yes
Sharps (>2.0mm)	% w/w	< 0.25	0.0	Yes

Parameter	Unit	Guidelines	Value	Result	Compliance
Heavy Metals and Hydrocarbons					
Total Arsenic (As)	mg/kg	S4UL	<37	13.6	Yes
Total Barium (Ba)	mg/kg	S4UL	<1300	68.3	Yes
Total Beryllium (Be)	mg/kg	S4UL	<1.7	0.7	Yes
Total Cadmium (Cd)	mg/kg	S4UL	<11	0.14	Yes
Total Chromium (Cr)	mg/kg	S4UL	<910	25.9	Yes
Hexavalent Chromium (Cr Vi)	mg/kg	S4UL	<6	<0.1	Yes
Total Cyanide (Cn)	mg/kg	Dutch Action Value (DAV)	<20	<1	Yes
Total Lead (Pb)	mg/kg	SP1010 (Defra Category 4)	<200	35.9	Yes
Total Mercury (Hg)	mg/kg	S4UL	<1.2	<0.2	Yes
Total (mono) Phenols	mg/kg	S4UL	<550	<1	Yes
Total Selenium (Se)	mg/kg	S4UL	<250	0.18	Yes
Total Vanadium (V)	mg/kg	S4UL	<410	26.6	Yes
Water Soluble Barion (B)	mg/kg	S4UL	<290	3.8	Yes
Water Soluble Sulphate (SO4)	g/l	BRE Special Digest 1:2005 (BRE)	<1.2	0.80	Yes
Acenaphthylene	mg/kg	S4UL	<420	<0.05	Yes
Acenaphthene	mg/kg	S4UL	<510	<0.05	Yes
Anthracene	mg/kg	S4UL	<5400	<0.05	Yes
Benzo (a) Anthracene	mg/kg	S4UL	<11	0.1	Yes
Benzo (a) Pyrene	mg/kg	S4UL	<2.7	<0.1	Yes
Benzo (b) Fluoranthene	mg/kg	S4UL	<3.3	0.2	Yes
Benzo (g,h,i) Perylene	mg/kg	S4UL	<340	<0.1	Yes
Benzo (k) Fluoranthene	mg/kg	S4UL	<93	<0.1	Yes
Chrysene	mg/kg	S4UL	<22	0.2	Yes
Dibenzo (a,h) Anthracene	mg/kg	S4UL	<0.28	<0.1	Yes
Fluoranthene	mg/kg	S4UL	<560	0.4	Yes
Fluorene	mg/kg	S4UL	<400	<0.05	Yes
Indeno (1,2,3-cd) Pyrene	mg/kg	S4UL	<36	<0.1	Yes
Naphthalene	mg/kg	S4UL	<5.6	<0.05	Yes
Phenanthrene	mg/kg	S4UL	<200	0.2	Yes
Pyrene	mg/kg	S4UL	<1200	0.3	Yes
Total PAHs (sum SUEPA16)	mg/kg	TOHA	<40	1.5	Yes
Aliphatic TPH (C5 - C6)	mg/kg	S4UL	<78	<0.1	Yes
Aliphatic TPH (C6 - C8)	mg/kg	S4UL	<230	<0.1	Yes
Aliphatic TPH (C8 - C10)	mg/kg	S4UL	<65	<0.1	Yes
Aliphatic TPH (C10 - C12)	mg/kg	S4UL	<330	<1	Yes
Aliphatic TPH (C12 - C16)	mg/kg	S4UL	<2400	<1	Yes
Aliphatic TPH (C16 - C21)	mg/kg	S4UL	<92000	5.7	Yes
Aliphatic TPH (C21 - C35)	mg/kg	S4UL		54.7	Yes
Aliphatic TPH (C35 - C44)	mg/kg	S4UL	<92000	<1	Yes
Aromatic TPH (C5 - C7)	mg/kg	S4UL	<140	<0.01	Yes
Aromatic TPH (C7 - C8)	mg/kg	S4UL	<290	<0.01	Yes
Aromatic TPH (C8 - C10)	mg/kg	S4UL	<83	<0.1	Yes
Aromatic TPH (C10 - C12)	mg/kg	S4UL	<180	<1	Yes
Aromatic TPH (C12 - C16)	mg/kg	S4UL	<330	<1	Yes
Aromatic TPH (C16 - C21)	mg/kg	S4UL	<540	11.8	Yes
Aromatic TPH (C21 - C35)	mg/kg	S4UL	<1500	108	Yes
Aromatic TPH (C35 - C44)	mg/kg	S4UL	<1500	31.6	Yes
Benzene	mg/kg	S4UL	<0.17	<0.02	Yes
Toluene	mg/kg	S4UL	<290	<0.2	Yes
Ethylbenzene	mg/kg	S4UL	<110	<0.04	Yes
O-xylene	mg/kg	S4UL	<140	<0.1	Yes
M & P-xylene	mg/kg	S4UL	<270	<0.2	Yes
MTBE	mg/kg	Sail Guideline Values	<470	<0.05	Yes

Bourne Amenity, The Wharf, Rye Road, Newenden, Kent TN18 5QG

01797 252299 • enquiries@bourneamenity.co.uk

www.bourneamenity.co.uk

VAT No: 863 1196 22 • Registered in England No: 3453821

