



The Turf Underlay is a superior mix that creates a thriving lawn environment. It is specially developed for the use in both residential and amenity turf areas. The mix contains minerals and inorganic components, as well as a percentage of organic product for better structure and nutrition. The Turf Underlay has high permeability which creates a free draining environment to decrease the chance of fungal growth.

The Turf Underlay is tested to Specification C1 – Passive Amenity Turf from the text Soil for Landscape Development by Leake and Haeger. It is also tested for Bulk Density, Saturated Bulk Density & Environmental Compliance as special requests outside the general Australian Standard suite.

## Test Results:

February 2024

Physical Properties	Unit	Target Range	Results	Comments
2.0 mm (fine gravel)	% retained by mass	< 10	3.61	Acceptable
1.0 mm (very coarse sand)	% retained by mass	< 10	5.81	Acceptable
0.5 mm (coarse sand)	% retained by mass	10 - 30	7.36	Acceptable
0.25 mm (medium sand)	% retained by mass	20 - 40	60	High
0.1 mm (fine sand)	% retained by mass	10 - 30	1.25	Low
0.05 mm (very fine sand)	% retained by mass	5 - 15 (max 25% combined of vfs, si + cl)	1.12 - 21.97	Acceptable
< 0.05 mm (fine particles)	% retained by mass	3 - 8	1.18	Slightly Low
Large Particles	% by mass	2 - 20 mm = < 10%	3.61	Acceptable
Organic Matter Content	% w/w	> 20mm = 0%	<0.01	Acceptable
Permeability	mm/h	> 2 to 8	8.1	Acceptable
Wettability (AS4419)	mm/min	> 30 (@ 16 Drops)	1062	Acceptable
Dispersibility in Water	Category	> 5	18	Acceptable
		1 or 2 (AS4419)	1	Acceptable
Chemical Properties	Unit	Target Range	Results	Comments
pH in Water (1:5)	pH units	5.4 - 8.0	5.87	Acceptable
pH in CaCl <sub>2</sub> (1:5)	dS/m	5.2 - 7.5	5.44	Acceptable
Electrical Conductivity (1:5)	mg/ L	< 0.5	0.67	Acceptable
Exchangeable Na percentage	mg/ L	< 7	12.1	Acceptable
Exchangeable Ca:Mg ratio	mg/ L	3 - 9	2.5	Slightly High
Available Phosphorus	-	50 - 150 20 - 50	31	Slightly Low
Available Nitrogen (NO <sub>3</sub> )	mm	20 - 60	0.32	Low

### When requesting test information, please read the comment below:

Scapeworks commissions independent testing to specifications from "Soils for Landscape Development: Selection, Specification and Validation - Leake and Haeger" as well as the relevant Australian Standards 3743 and 4419, to collect as much information as we can on the fit

for purpose performance of the mixes. All independent declaration of compliance and independent testing results are available upon request. Our focus is to provide structurally robust and environmentally responsible growing media that encourages healthy plant life.



### Bulk Density 0.91kg/L. Saturated Bulk Density 1.4kg/L

"We consider the material fit for purpose as a turf underlay in all but high grade sports field situations provided the turf is fertilized once established as is normal practice" - **SESL Australia.**