



BIO WOOL®

BIODEGRADABLE MULCH

Technical Data Sheet



100%
BIODEGRADABLE



Overview

BioWool® mulch material forms a **fully biodegradable** weed suppressant matting made in the **UK from wool**, a small quantity of other natural materials (straw and other 'sweepings') and a strong scrim backing, which is guaranteed to leave no plastic microbeads in the soil as it degrades naturally over a number of years, due to soil microbe activity.

BioWool® retains its natural Lanolin smell, which is believed to **deter deer** from browsing in the vicinity of the mat.

www.bio-wool.co.uk



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Application

BioWool® Can be used in forestry, landscaping and domestic situations where prevention of weed growth around young plants is required without the use of herbicides. BioWool® also absorbs up to 30% of its own weight in water, so acting as a moisture 'reservoir' around the base of the plant to help survival during the establishment phase or in drought conditions.

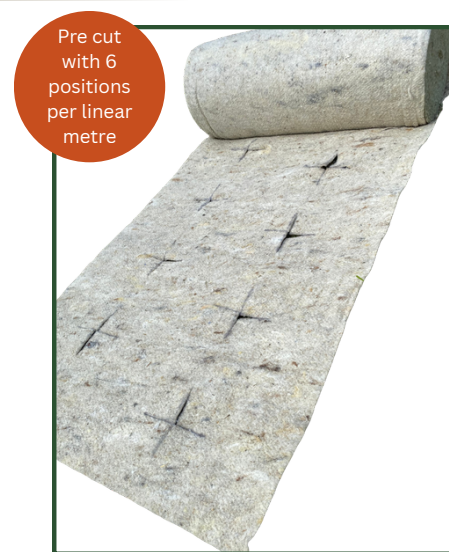
Product Range



Mulch Mats



Mulch Rolls



EzeeHedge Mulch Rolls

The Benefits of BioWool®

100% biodegradable – no need to recover and dispose of after its useful life, unlike mats containing plastic or compostable only materials such as PLA.

Reduced carbon impact – compared with other natural fibre mats, made from Jute/Hessian/Coir which come from countries such as Pakistan/Bangladesh/Brazil, the woollen fibre in BioWool® is grown, harvested and processed in the UK.

Helps to prevent weed growth around the plant and so promote healthy establishment

Provides a moisture 'reservoir' which is slowly released after rain/irrigation and which facilitates healthy growth

Firmly enmeshed fibres needle punched onto a strong scrim backing make BioWool® **robust and long-lasting**

Provides a much-needed market for otherwise un-saleable British wool.



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Installation

Prepare the site prior to installation by clearing the ground around the tree. The more securely BioWool® mats are pinned to the soil, the better they will prevent wind/voles or other animals from lifting the mat and reducing its effectiveness.



Installation is recommended using bamboo pegs, which have a sharp point and retain the 'culm', which prevents the peg from pushing through the mat.



Plant the tree and install the stake/cane (if using treeshelters or spirals), then position the mat around the tree and stake. If there is enough room, overlap a little of the mat and insert one peg in between the tree and the stake, making sure that the soil is completely covered by the mat material to prevent weed growth inside the tube as well as around the tree.

Next, insert a peg on the overlap corner of the mat, ensuring there is no gap for weeds or grass to grow through. Finally, install pegs on the remaining three corners. The treeshelter or spiral can then be positioned over the tree, making sure it is tightly pushed down to prevent animals from getting underneath.

Technical Features

- The fabric is 450 grams per square metres. For example, each 500x500mm mat weighs 112.5g, with a variable thickness of 5-8mm.
- The mats are composed of over 99% British wool with a small percentage of other natural fibres..
- The mulch mats have a cut from the corner to the centre of each mat, to enable it to be positioned over the tree/stake with a small overlap.
- The wool is washed at 70°C and dried at 90°C to clean it while preserving the natural lanolin, which helps deter deer. The cleaning and washing regime is designed to remove faeces.



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Biodegradation & Quality

The scrim is made from a synthetic fibre which has been conditioned/treated to make it palatable to soil microbes.

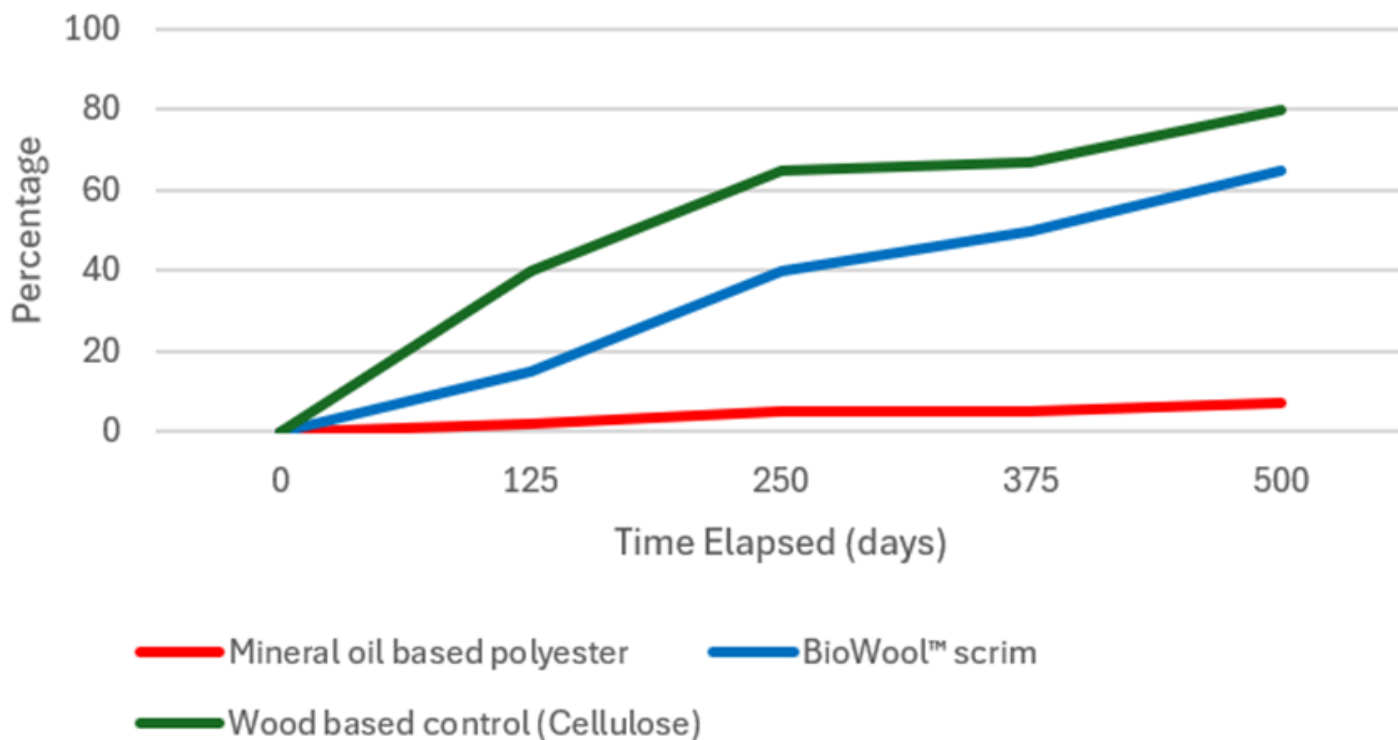
It has been tested for soil biodegradability in an approved laboratory to ASTM D5988 standards (or ISO 17556, which is more familiar in the UK).



The graph below shows the steady trajectory of the BioWool® scrim fibre as it biodegrades - **blue** middle line. The **green** top line is a 'control' of wood-based cellulose which degrades faster, and the **red** line shows how mineral oil-based polyester, tested using the same method, is not ingested by soil microbes and therefore does not biodegrade in soil.



Biodegradation



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Product Range

All products have a nominal thickness of 5-8mm

All products have a weight of 450 grams per square metre

Bespoke Sizes are available upon application

Product	Size	Quantity per pack	Quantity per pallet	Quantity per full load
BioWool® Mulch Mat	500 x 500mm	100	1600	35,200
BioWool® Mulch Mat	750 x 750mm	50	500	11,000
BioWool® Mulch Mat	1000 x 1000mm	1	250	5,500
BioWool® Mulch Roll	1000mm x 25 metre	1	16	352
BioWool® EzeeHedge Roll	1000mm x 25 metre	1	16	352

Suggested Specification Text

For Mulch Mats

Trees/shrubs should be installed with 100% biodegradable mulch mats around the base to prevent weed growth and retain moisture. Mats should be made from UK produced wool, be designed to last a minimum of 2 years and comply with soil biodegradability standards ASTM D5988/ISO 17556.

Before installing, an area of around the tree/shrub should be cleared of weeds by screening or herbicide application. Mats should be secured tight to the ground using bamboo anchoring pegs. 5 pegs per mat for 500x500mm, 9 pegs per mat for 750x750mm or 12 pegs for the 1000x1000m.

Available from BioWool® 01289 386755 hello@bio-wool.co.uk

For Mulch Rolls

Trees/shrubs/Hedging plants should be installed with 100% biodegradable mulch rolls around the base to prevent weed growth and retain moisture. Rolls should be made from UK produced wool, be designed to last a minimum of 2 years and comply with soil biodegradability standards ASTM D5988/ISO 17556.

Before installing, an area of around the planting area should be cleared of weeds.

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