MACCAFERRI

TECHNICAL DATA SHEET

Rev: 16a, Date 25.06.2024

MACMAT® 19.1 GEOMAT

MacMat® is a geomat consisting of a three-dimensional structure having a biconical cuspated shape made from polypropylene filaments. MacMat® geomat is used to prevent erosion and surface planar failure phenomena on slopes. It is also used in hydraulic/water channels to protect them from the abrasive and tractive forces applied by the stream flow.

MacMat®			19.1
Basic polymer properties			
Polymer			Polypropylene
Melting point (1)	ISO 11357-3	°C	160
Density (1)	ISO 1183	kg/m^3	900
Inflammability	EN ISO 11925-2	Class	F
UV resistance			Stabilized
Mechanical properties			
Tensile strength T_{ch} - MD (2)	EN ISO 10319	kN/m	2.3 (- 0.3)
Strain at T_{ch} - MD (3)		%	55 (± 25)
Tensile strength T_{ch} - CMD (2)		kN/m	1.1 (- 0.3)
Strain at T_{ch} - CMD (3)		%	50 (± 25)
Physical Properties			
Structure			Biconical cuspate shape
Mass per unit area (4)	EN ISO 9864	g/m^2	550 (± 40)
PP single filament diameter		mm	500 (± 30%)
Colour			Black or Brown (RAL 8012) or Green (RAL 6020)
Voids index (4)		%	> 90
Thickness at 2 kPa (3)	EN ISO 9863-1	mm	19.0 (± 3.0)
Roll width (5,6)		m	4.20
Roll length (6)		m	45
Roll area		m^2	189
Durability, Environmental and Sustainability Properties			
Content of SVHC (7)	ISO 14025 EN 15804	%	≤ 0.1
Global Warming Potential Total (GWP) (7)		kg CO_2 Eq.	≤ 1.23E+00
Acidification Potential (AP) (7)		mol H+ Eq.	≤ 3.30E-03
Eutrophication Potential freshwater (EP-fr) (7)		kg P Eq.	≤ 2.45E-06
Eutrophication Potential marine (EP-mar) (7)		kg N Eq.	≤ 1.19E-03
Eutrophication Potential terrestrial (EP-ter) (7)		mol N Eq.	≤ 1.29E-02
Durability	Annex B - hEN		Can be exposed up to 28 days durable in natural soil with 4<pH<9 and soil temperature <25°C for a minimum of 25 years service life

(1) Informative value given at the best of our knowledge;
(2) Short-term tests in accordance with EN ISO 10319:2015. The values given correspond to Minimum Average Value at 95% confidence limit to establish the characteristic short-term tensile strength (T_{ch}) in accordance with EN 13251:2016 and calculated as the mean value of ultimate strength deducting the tolerance;
(3) Typical value;
(4) Nominal value, where no specific tolerance is indicated a standard of 10% is admissible;
(5) The material is also available in 2.10 m and 1.95 m width on request;
(6) Standard dimensions; other dimensions available on request - check feasibility with your local Maccaferri branch. A standard tolerance of 2% is admissible with reference to the declared value;
(7) Values reported in the EPD certificate KIWA-EE- 000378-EN issued in accordance with EN15804+A2: 2019 and ISO14025 with validity till April 2029. The reported values are selected among the 13 mandatory certified values (EN 15804+A2:2019) and referred to the Product Stage A1-A3. Additional environmental impact indicators and different Product Stages valid for Life Cycle Assessment are reported in the full EPD certificate of the product.

MD: Machine direction; CMD: Cross Machine Direction

ECO PLATFORM EPD VERIFIED kiwa Ecobility Experts UK CA 0338-CPR-5572

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Maccaferri Ltd:
T: (+44) 1865 770555 www.maccaferri.com/uk

Rep of Ireland:
T: (+353) 18851662 www.geostrong.net

Specialist areas:
Sales: E: sales.uk@maccaferri.com
Technical: E: technical.uk@maccaferri.com
Construction: E: construction.uk@maccaferri.com

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