

# DATASHEET

Hipertex® is a nonwoven geotextile made of high tenacity polypropylene fibers.

## PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	UNIT	90	100	125	150	180	200	250	300	350
Static puncture resistance	EN ISO 12236	N	1000	1250	1600	2000	2400	2800	3400	4000	4800
Dynamic puncture resistance	EN ISO 13433	mm	40	36	28	23	22	20	15	12	9
Tensile strength (MD)	EN ISO 10319	kN/m	6,0	8,0	10,0	12,0	14,0	16,5	20,0	25,0	29,0
Tensile strength (CMD)	EN ISO 10319	kN/m	6,0	8,0	10,0	12,0	14,0	16,5	20,0	25,0	29,0
Elongation at maximum load (MD)	EN ISO 10319	%	45	45	50	50	50	55	55	55	55
Elongation at maximum load (CMD)	EN ISO 10319	%	45	45	45	50	50	55	60	60	60
Energy index	EN ISO 10318	kJ/m <sup>2</sup>	1,35	1,80	2,25	3,00	3,50	4,50	4,70	5,70	8,20

HYDRAULIC PROPERTIES	TEST METHOD	UNIT	90	100	125	150	180	200	250	300	350
Waterflow normal to the plane	EN ISO 11058	l/m <sup>2</sup> s	110	100	95	90	80	70	55	45	40
Velocity index	EN ISO 11058	m/s	0,110	0,100	0,095	0,090	0,080	0,070	0,055	0,045	0,040
Opening size O <sub>90</sub>	EN ISO 12956	µm	115	110	100	95	90	80	75	70	65
Waterflow in the plane at 20kPa i=1	EN ISO 12958	10 <sup>-3</sup> l/ms	-	-	-	-	-	-	-	3,0	3,5

PHYSICAL PROPERTIES	TEST METHOD	UNIT	90	100	125	150	180	200	250	300	350
Thickness	EN ISO 9863/1	mm	0,6	0,6	0,7	0,9	1,0	1,3	1,5	1,7	1,9
Mass per unit area	EN ISO 9864	g/m <sup>2</sup>	90	100	125	150	180	200	250	300	350

## DURABILITY

Predicted to be durable more than 25 years in natural soil with 4 < pH < 9 and soil temperature < 25° C.  
3 levels of weathering resistance available: to be covered within 1/14/30 days after installation.

The values given are average values from internal laboratories and accredited testing institutes. The right is reserved to make changes without notice at any time. No guarantee or liability can be drawn from the information mentioned herein.

## FUNCTIONS:

Separation, Filtration, Reinforcement.

## ACCORDING TO EUROPEAN STANDARDS:

EN 13249 EN 13250 EN 13251 EN 13252 EN 13253  
EN 13254 EN 13255 EN 13256 EN 13257 EN 13265



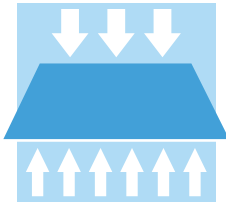
Factory production control for Hipertex® certified CE-marking level 2+



The Quality System of Tessilbrenta is certified according to ISO 9001

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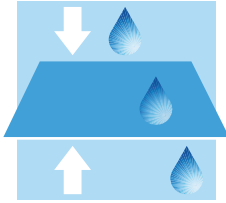
**SEPARATION**



The main task of **Hipertex**<sup>®</sup> is to separate different types of material that form the rail and road embankments. It is usually used with soils with low bearing capacity.

**Hipertex**<sup>®</sup> is robust because it is made with very high tenacity and durability fibers. It guarantees the uniformity and thickness of various layers that form the embankment and preventing the penetration of various materials.

**FILTRATION**



**Hipertex**<sup>®</sup> provides excellent filtration properties, because it is characterized by high water permeability and excellent retention capacity of the soil, even in conditions of high hydraulic stress. This ensures that the water flow remains constant, thus providing a soil drainage quickly and efficiently.

**APPLICATIONS**



**ROADS**



**RAILWAYS**



**DEWATERING TRENCHES**



Tessilbrenta uses more than 80% of electricity and more than 60% of the heat energy from renewable sources, with a reduction in carbon dioxide emissions of 3200 tons per year.