

## TECHNICAL DATA SHEET



KAYAPP

Product Name: **DIMPLEDRAIN**



Reference No: DS DRNG 0708-09/2016 Rev 3

Date: 15 April 2019

Description: Geocomposite drain comprising a **bidim**<sup>®</sup> geotextile filter layer affixed to a single cusped 500 µm HDPE drainage core.

### DD 500

**Geotextile:** Nonwoven continuous filament double needlepunched polyester

#### Mechanical Properties

Thickness	Under 2kPa	mm	1.4	SANS 9863 / ISO 9863-1
Tensile Strength in weakest direction	Machine	kN/m	8.0	SANS 1525 / ISO 10319
	Elongation	%	50 - 70	
Penetration Load	CBR	kN	1.5	SANS 12236 / ISO 12236
Puncture Resistance	Diameter of hole (max)	mm	28	SANS 13433 / ISO 13433
UV Light Stability	Retained strength after 500 hours exposure		> 70%	ASTM D4355

#### Hydraulic Properties

Nominal Throughflow @50mm head	l/s/m <sup>2</sup>	170	SANS 110583 / ISO 11058
Permeability @50 mm head	m/s x10 <sup>-3</sup>	4.8	
Permittivity @50 mm head	s <sup>-1</sup> 6.2x10 <sup>-3</sup>	3.4	
Pore Size O <sub>95w</sub>	µm	130	SANS 12956 / ISO 12956

#### Core (Ref: Technical Data Sheet – DS DRNG 0712-10/2016)

Type		Cusped, 7x7:4	
Material		HDPE	
Carbon black content	%	1.5-2.6	ASTM D4218

<b>Composite:</b>			
<b>Mechanical Properties</b>			
Thickness @2kPa	mm	5.1	SANS 9863-1 / ISO 9863-1
Mass per unit area	g/m <sup>2</sup>	720	SANS 9864 / ISO 9864
Tensile Strength	kN/m (MD/CD)	15.5/15.5	SANS 1525 / ISO 10319
Static Puncture Strength	N	2500	SANS 12236 / ISO 12236
<b>Hydraulic Properties</b>			
<u>In-plane water flow</u>		HG = 1	
@ 20 kPa	l/m/s	0.65	ISO 12958
@ 100 kPa	l/m/s	0.60	ISO 12958
@ 250 kPa	l/m/s	0.55	ISO 12958
@ 500 kPa	l/m/s	0.47	ISO 12958
Between semi-rigid rubber surfaces to simulate soil pressure.			
<b>Other properties</b>			
Resistant to weathering	Good Practice to cover in 10 days.		
Chemical Resistance	Good resistance to most chemicals. All components compatible with most leachates.		
Resistance to microbes	No significant effect		
Compatibility with Geomembranes & GCLs	Fully Compatible		
Health, Safety, Environment	INERT. No known health hazard		
<b>Dimensions</b>			
Roll width & length	m	1.18 x 103	

The above values are Typical.

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