

Technical Data Sheet



CARBOFOL® HDPE 406 1,5 BF/TF GM13

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CARBOFOL® is a resistant and multifunctional geomembrane (GBR-P) with structured surface on both sides used in many fields of sealing applications

Values tested in the structured area if not otherwise indicated

Property	Test Method	Unit	Values**	Testing Frequencies (minimum)
Thickness - average per roll width (tolerance: -5%) - lowest individual of 10 values (tolerance: -10%)	ASTM D5994	mm	1.50	per roll
Asperity height	ASTM D7466	mm	≥ 0.9	every 2 nd roll
Density	ASTM D792 / ASTM D1505	g/cm ³	≥ 0.940	90,000 kg
Melt Flow Rate (MFR), 190°C / 5.0 kg	ASTM D1238 / EN ISO 1133	g/10 min	1 - 3	per production lot
Carbon black content	ASTM D1603	%	2 - 3	9,000 kg
Carbon black dispersion	ASTM D5596	category	1 - 2	20,000 kg
NCTL – Test* Stress crack resistance	ASTM D5397	hours	≥ 500	GRI GM-10
Tensile strength at yield	ASTM D6693	kN/m	≥ 22	9,000 kg
Elongation at yield	ASTM D6693	%	≥ 12	9,000 kg
Tensile strength at break	ASTM D6693	kN/m	≥ 16	9,000 kg
Elongation at break	ASTM D6693	%	≥ 100	9,000 kg
Tear resistance	ASTM D1004	N	≥ 187	20,000 kg
Puncture resistance	ASTM D4833	N	≥ 400	20,000 kg
Oxidative Induction Time (OIT)***				
a) Standard OIT	ASTM D3895	min	≥ 100	90,000 kg
b) High pressure OIT	ASTM D5885	min	≥ 400	
Oven Aging at 85°C*** (retained after 90 days)				
a) Standard OIT	ASTM D3895	min	≥ 55	per each formulation
b) High pressure OIT	ASTM D5885	min	≥ 320	
UV Resistance				
a) High pressure OIT	ASTM D5885	min	≥ 200	per each formulation

*values tested in the smooth area of the welding zones; **average result of specified test specimen over the width, unless otherwise indicated; ***GM13: The manufacturer has the option to select either one of the OIT test methods

Item-no.	6110225		
Roll size	length x width	m x m	150 x 7.5
Roll weight	approx.	kg	1,869

The listed technical values are guiding values achieved in our laboratories and/or independent testing institutes. Our products are subject to changes without prior notice.