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#### Gantiel Vensott Engineering Plastic Solutions

#### **Product Description**

Venslide 7G, green UHMWPE of a very high quality base resin, is renown for its unique properties of excellent impact strength and abrasion resistance. Widely used for abrasion resistant and conveying application makes this material a popular choice for rollers, under chain guides, chutes hoppers and bin liners, wear strips and many flow promoting/non stick applications. Some presence of post industrial reused/repro material resin makes it more cost effective and better in environmental sense, without any significant sacrifice of properties.

## **Applications**

Venslide 7G Rod is ideally suited for the manufacture of bushings, rollers and conveyor parts, such as transfer rollers and sprockets. When in sheet form, it is best suited for wear applications especially in contact with metals and other media. It is commonly used in industrial applications such as chute linings, chain guides, flow promoting paneling, impact blocks.

# **Other Material Properties**

This grade of polyethylene exhibits good combination of stiffness, toughness, mechanical damping ability with wear and abrasion resistance and can easily be filler welded.

### Key Features and Benefits

- High Abrasion Resistance
- Low Coefficient of Friction
- Lightweight
- Less Expensive than Stainless Steel
- Adaptable to a wide variety of applications
- Formable
- High Impact Resistance
- Chemical Resistant
- Excellent Retrofit for Protective Linings
- Can be cut, shaped, drilled, turned and tapped "on site" with ordinary woodworking tools.

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Technical Properties				
	Value	Unit	DIN	ISO/EC
Molecular Weight		g/mol		45507-0040
Code		Ka/dm <sup>3</sup>	E2470	15527:2013
Density Water Absoption – saturation at 23 <sup>o</sup> C	≤0.96 ≤0.01	Kg/dm <sup>3</sup> %	53479 53715	1183
Water Absoption – saturation at 25°C	<0,01	70	53715	
Mechanical Properties				
	Value	Unit	DIN	ISO/EC
Yield/Break stress	~20	MPa	53455	527
Breaking elongation	>280	%	53455	527
Zug-E-Modul	>700	MPa	53457	
Notch impact Strength – Charpy	≥80	kJ/m <sup>2</sup>	53453	179
Shore hardness D	61-65	0	868	7619-1
Ball hardness	>30	N/mm <sup>2</sup>	53456	2039
Sand Slurry Test	120 ~0.2	%		15527
Coefficient of sliding friction Steel (0.25m/s, 0.25N/mm <sup>2</sup> )	~0.2			
Coefficient of sliding friction POM				
$(0.25 \text{ m/s}, 0.25 \text{ N/mm}^2)$				
Electric Properties				
	Value	Unit		Verificatior
Electrical strength	≤45	KV/mm	53481	60243
Specific constant resitance	>10 <sup>12</sup>	$\Omega$ x cm	53482	60093
Surface resistance	>10 <sup>12</sup>	Ω	53482	60093
Thermal Properties				
	Value	Unit	DIN	ISO/EC
Melting point	130-135	0C		3146 method
Heat conductivity 23°C	0.4	W (K x m)	52612	
Linear thermal coefficient of expansion	20x10 <sup>-5</sup>	m/(K x m)	53752	11359-2
$\alpha$ (average value between 23 and		· · ·		
60°C)				
Upper service Termperature in air	90	<sup>0</sup> C		
short term				
Upper service Termperature in air constant (5000h)	80	0°C	53446	
Lower service Termperature	-150	°C		
Burning behavior per UL94 – sample	HB			
thickness 3/6mm				
Physilogical properties				
	Value	Unit	DIN	ISO/EC
Approved for use in food industry (FDA)	No			
Approved for use in food industry (EU)	No			
	INU			

The values shown in the table, enable to compare materials faster. Thee values are short-term values, which can be influcenced by processing, environmental as well as application conditions. Therefore, these vaues do not represent assured properties. It is due to the customer's responsibility whether the chosen material is suitable for its specific application.