

Product Information

VESTOSINT® 2178 white

Polyamide 12 for electrostatic coating and liquid coating systems

VESTOSINT 2178 white is a titanium dioxide filled polyamide 12 fine powder for the use in liquid coating systems. It is used as an additive for instance in coil coating systems to improve abrasion resistance and T-bend test.

VESTOSINT 2178 is also developed for electrostatic coating of metal parts, e.g., coating of components in the automotive industry.

For more information we recommend our brochure "VESTOSINT – Fine Powder at its Best".

For further information, please contact our experts in the department Market Development of the High Performance Polymers Business Line.

Powder Information

Property	Test method		Unit	VESTOSINT 2178 white
	international	national		
App. bulk density	ISO 60	DIN EN ISO 60	g/dm ³	≥ 380
Average particle size	d50	Laser diffraction analysis (Sympatec Helos)	µm	approx. 20

Density, water absorption, thermal, mechanical and electrical properties

Property	Test method		Unit	VESTOSINT 2178 white	
	international	national			
Melting point	ISO 3146	DIN EN ISO 3146	°C	184	
Density	23 °C	ISO 1183	DIN EN ISO 1183	g/cm ³	1.23
Shore hardness D	ISO 868	DIN EN ISO 868		75	
Ball indentation hardness	H30	ISO 2039-1	DIN EN ISO 2039-1	N/mm ²	90
Tensile test	ISO 527-1	DIN EN ISO 527-1			
Stress at yield	ISO 527-2	DIN EN ISO 527-2	MPa	43	
Strain at yield			%	6	
Strain at break			%	> 50	
Volume resistivity	IEC 60093	DIN IEC 60093	Ω · m	10 ¹²	
Dielectric breakdown voltage	K20/P50	IEC 60243-1	DIN EN 60243-1	kV/mm	90
Water absorption	100 °C, immersion	ISO 62	DIN EN ISO 62	%	1.9
Moisture absorption	23 °C, 96 % r. h.	ISO 62	DIN EN ISO 62	%	1.3
	23 °C, 50 % r. h.			%	0.5
Coef. of linear expansion	23 - 55 °C	ISO 11359	DIN 53752	10 ⁻⁴ · K ⁻¹	1.09
Thermal conductivity			Referring to DIN 52612	W/m · K	0.23 - 0.29
Specific heat			DIN 53765	J/g · K	2.35
Taber abraser	CS17, 500g	ASTM D 1242	DIN 53 754	mg/100 turns	< 1

Pigmentation may affect values.

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