

Conductive Plastics

Hostaform® acetal copolymer grades

Static Dissipative

C27021 AST Enhanced anti-static dissipative properties

Electrically Conductive

C 9021 ELS Electrically conductive carbon black and elastomer

Celcon® acetal copolymer grades

Static Dissipative

AS270 M270 based product with enhanced anti-static dissipative properties **AS450** M450 based product with enhanced anti-static dissipative properties

LW270AS M270 based product with enhanced low wear and anti-static dissipative properties

Electrically Conductive

CH-15 Carbon fiber filled grade with electrical conductivity and electrostatic dissipative

properties and higher strength and stiffness than EF-10.

EC90PLUS Semi-conductive grade with electrostatic dissipative properties

EF10 10% carbon fiber reinforced, electrically conductive

Property	Test Method	Units	Static Dissipative C27021AST	Electrically Conductive C9021ELS	
Physical					
Density	ISO 1183	g/cm³	1.41	1.37	
Melt mass-flow rate MFR 190/2.16	ISO 1133	g/10 min	_	_	
Volume flow rate MVR 190/2.16	ISO 1133	ml/10 min	24.5	3	
Water Absorption 23°C and Saturation 23°C and 50% Relative Humidity	ISO 62	%	0.7 0.2	2.8 0.25	
Mechanical					
Yield Stress	ISO 527	MPa	63	35	
Tensile Modulus	ISO 899	MPa	2,800	1,900	
Tensile Creep Modulus at 1 hour at 1,000 hours	ISO 899	MPa	2,400 1,300	1,400 1,000	
Flexural Strength	ISO 178	MPa	_	_	
Flexural Modulus	ISO 178	MPa	_	_	
Charpy Impact Strength at 23°C	ISO 179/1eU	kJ/m²	16	5	
Izod Impact Strength - Notched at 23°C at -30°C	ISO 180/A	kJ/m²	_	_	
Izod Impact Strength - Unnotched at 23°C at -30°C	ISO 180/A	kJ/m²	_	_	
Thermal					
Heat Deflection Temperature HDT/A	ISO 75	°C	100	89	
Melting Point DSC, 10°C/min	ISO 11357-3	°C	166	166	
Electrical					
Volume Resistivity	ohm-cm		1014	1.5	
Surface Resistivity	ohms		1013	8,000	

Property	Test Method	Units	Anti-static Grades			Electrical Conductivity		
			AS270	AS450	LW270-AS	CH-15	EF10	EC90-PLUS
Physical								
Density	ISO 1183	g/cm³	1.41	1.4	1.41	1.44	1.42	1.37
Melt mass-flow rate MFR 190/2.16	ISO 1133	g/10 min	27	45	30	4.5		5
Volume flow rate MVR 190/2.16	ISO 1133	ml/10 min	23.2	38.6	25.8			4
Water Absorption 23°C and Saturation 23°C and 50% Relative Humidity	ISO 62	%						2.8 0.25
Mechanical								
Yield Stress	ISO 527	MPa	64	67	53	151		37
Tensile Modulus	ISO 899	MPa		2,800			8,760	1,810
Tensile Creep Modulus at 1 hour at 1,000 hours	ISO 899	MPa						1,300 900
Flexural Strength	ISO 178	MPa				200	110	85
Flexural Modulus	ISO 178	MPa	2,700	2,800	2,310	11,780	8,180	1,660
Charpy Impact Strength at 23°C	ISO 179/1eU	kJ/m²		4			4.2	4.4
Izod Impact Strength - Notched at 23°C at -30°C	ISO 180/A	kJ/m²	_	5	6	6.5	4.7	4.4
Izod Impact Strength - Unnotched at 23°C at -30°C	ISO 180/A	kJ/m²						85 35
Thermal								
Heat Deflection Temperature HDT/A	ISO 75	°C	95	100	98	160	154	70
Melting Point DSC, 10°C/min	ISO 11357-3	°C	165	167	165	165	165	165
Electrical								
Volume Resistivity	ohm-cm							600
Surface Resistivity	ohms							1,000



World-Class Engineering Polymers

- Celanex® thermoplastic polyester (PBT)
- Celcon® and Hostaform® acetal copolymer (POM)
- Celstran® and Compel® long fiber reinforced thermoplastics (LFRT)
- Fortron® polyphenylene sulfide (PPS)
- GUR® ultra-high molecular weight polyethylene (UHMW-PE)
- Impet® thermoplastic polyester (PET)
- Riteflex® thermoplastic polyester elastomer (TPC-ET)
- Vandar® thermoplastic polyester alloy (PBT)
- Vectra[®] liquid crystal polymer (LCP)

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