

Technical Data

Product Description	
	Base Polymer Polyphenylene Sulphide
	Filler/Additive System 65 % glass fibre/mineral
TEDUR® L 9217-1	Special Features high stiffness, hot oil resistant, good hydrolysis resistant
	Market Segment Automotive, Machinery, Lighting
	Typical Applications highly stressed parts
Generic PPS - Glass Fiber\Mineral	This data represents typical values that have been calculated from all products classified as: Generic PPS - Glass Fiber\Mineral This information is provided for comparative purposes only.

General	TEDUR® L 9217-1	Generic PPS - Glass Fiber\Mineral
Manufacturer / Supplier	<ul style="list-style-type: none"> MOCOM Compounds GmbH & Co. KG 	<ul style="list-style-type: none"> Generic
Generic Symbol	<ul style="list-style-type: none"> PPS 	<ul style="list-style-type: none"> PPS
Material Status	<ul style="list-style-type: none"> Commercial: Active 	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> Asia Pacific Europe North America 	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe Latin America North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber\Mineral, 65% Filler by Weight 	<ul style="list-style-type: none"> Glass Fiber\Mineral
Features	<ul style="list-style-type: none"> High Stiffness Hydrolysis Resistant Oil Resistant 	--
Uses	<ul style="list-style-type: none"> Automotive Applications Lighting Applications Machine/Mechanical Parts 	--
RoHS Compliance	<ul style="list-style-type: none"> Contact Manufacturer 	--
Processing Method	<ul style="list-style-type: none"> Injection Molding 	--

Physical	TEDUR® L 9217-1	Generic PPS - Glass Fiber\Mineral	Unit	Test Method
Density / Specific Gravity	--	1.71 to 2.00	g/cm ³	ASTM D792
	1.97	1.62 to 2.11	g/cm ³	ISO 1183
Spiral Flow	--	8.93 to 12.0	cm	
Molding Shrinkage				
Flow	--	0.20 to 0.30	%	ASTM D955
Across Flow	--	0.40 to 1.0	%	ASTM D955
--	--	0.20 to 0.60	%	ISO 294-4
Water Absorption				
24 hr	--	0.019 to 0.020	%	ASTM D570
24 hr, 23°C	--	0.019 to 0.020	%	ISO 62
Saturation, 23°C	--	0.020 to 0.023	%	ISO 62
Equilibrium, 23°C, 50% RH	--	0.020 to 0.20	%	ISO 62



Mechanical	TEDUR® L 9217-1	Generic PPS - Glass Fiber/Mineral	Unit	Test Method
Tensile Modulus				
--	--	14400 to 19100	MPa	ASTM D638
--	19000	7700 to 24500	MPa	ISO 527-1
Tensile Stress				
Break	140	59.1 to 187	MPa	ISO 527-2
--	--	100 to 174	MPa	ASTM D638
--	--	114 to 180	MPa	ISO 527-2
Tensile Elongation				
Break	--	0.80 to 2.0	%	ASTM D638
Break	1.2	0.69 to 2.0	%	ISO 527-2
Flexural Modulus				
--	--	11900 to 20000	MPa	ASTM D790
--	19000	11900 to 21000	MPa	ISO 178
Flexural Strength				
--	--	149 to 261	MPa	ASTM D790
--	240	177 to 264	MPa	ISO 178
Compressive Strength	--	138 to 296	MPa	ASTM D695
Shear Strength	--	60.0 to 65.3	MPa	ASTM D732
Poisson's Ratio	--	0.34 to 0.36		ASTM E132
Coefficient of Friction	--	0.35		ASTM D1894
Flexural Deflection at Max Force	1.4	--	%	ISO 178
Impact	TEDUR® L 9217-1	Generic PPS - Glass Fiber/Mineral	Unit	Test Method
Charpy Notched Impact Strength	--	5.0 to 11	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength				
--	--	5.3 to 31	kJ/m ²	ISO 179
23°C	25	--	kJ/m ²	ISO 179/1eU
Notched Izod Impact				
--	--	50 to 85	J/m	ASTM D256
--	--	4.8 to 10	kJ/m ²	ISO 180
Unnotched Izod Impact				
--	--	200 to 320	J/m	ASTM D4812
--	--	10 to 27	kJ/m ²	ISO 180
Hardness	TEDUR® L 9217-1	Generic PPS - Glass Fiber/Mineral	Unit	Test Method
Rockwell Hardness				
--	--	100 to 121		ASTM D785
--	--	95 to 123		ISO 2039-2
Thermal	TEDUR® L 9217-1	Generic PPS - Glass Fiber/Mineral	Unit	Test Method
Deflection Temperature Under Load				
1.8 MPa, Unannealed	--	265	°C	ASTM D648
1.8 MPa, Unannealed	278	259 to 275	°C	ISO 75-2/A
8.0 MPa, Unannealed	--	215	°C	ISO 75-2/C
Melting Temperature	280	278 to 285	°C	ISO 11357-3
CLTE				
Flow	--	1.7E-5 to 2.0E-5	cm/cm/°C	ASTM D696
Flow	--	1.0E-5 to 1.5E-5	cm/cm/°C	ASTM E831
Flow	--	9.6E-6 to 2.4E-5	cm/cm/°C	ISO 11359-2
Transverse	--	1.7E-5 to 2.0E-5	cm/cm/°C	ASTM D696
Transverse	--	2.6E-5 to 7.1E-5	cm/cm/°C	ASTM E831
Transverse	--	1.9E-5 to 3.2E-5	cm/cm/°C	ISO 11359-2



Thermal	TEDUR® L 9217-1	Generic PPS - Glass Fiber\Mineral	Unit	Test Method
Thermal Conductivity	--	0.50 to 0.74	W/m/K	ASTM C177
Electrical	TEDUR® L 9217-1	Generic PPS - Glass Fiber\Mineral	Unit	Test Method
Surface Resistivity	--	1.0E+3 to 1.0E+16	ohms	ASTM D257
--	--	9.8E+14 to 1.0E+15	ohms	IEC 62631-3-2
Volume Resistivity	--	5.5E+2 to 2.5E+16	ohms·cm	ASTM D257
--	--	1.0E+16 to 1.1E+16	ohms·cm	IEC 60093
--	--	1.0E+13 to 3.5E+13	ohms·m	IEC 62631-3-1
Dielectric Strength	--	16 to 18	kV/mm	ASTM D149
--	--	13 to 27	kV/mm	IEC 60243-1
Dielectric Constant	--	4.00 to 5.01		ASTM D150
--	--	3.94 to 5.62		IEC 60250
--	--	5.10		IEC 60250
Dissipation Factor	--	2.0E-3 to 4.3E-3		ASTM D150
--	--	1.0E-3 to 2.1E-3		IEC 60250
Arc Resistance	--	179 to 185	sec	ASTM D495
Comparative Tracking Index (CTI)	--	225 to 275	V	UL 746A
Comparative Tracking Index	--	137 to 227	V	IEC 60112
Flammability	TEDUR® L 9217-1	Generic PPS - Glass Fiber\Mineral	Unit	Test Method
Flame Rating (0.75 mm)	V-0	--		UL 94
Glow Wire Flammability Index (2.0 mm)	960	--	°C	IEC 60695-2-12
Injection	TEDUR® L 9217-1	Generic PPS - Glass Fiber\Mineral	Unit	
Drying Temperature	--	114 to 151	°C	
Desiccant Dryer	130 to 140	--	°C	
Drying Time	--	3.0 to 4.1	hr	
Desiccant Dryer	2.0 to 4.0	--	hr	
Suggested Max Moisture	--	0.020 to 0.050	%	
Rear Temperature	--	280 to 320	°C	
Middle Temperature	--	309 to 321	°C	
Front Temperature	--	305 to 335	°C	
Nozzle Temperature	--	305 to 321	°C	
Processing (Melt) Temp	320 to 340	304 to 335	°C	
Mold Temperature	> 140	135 to 150	°C	
Injection Pressure	--	65.0 to 100	MPa	
Back Pressure	--	0.550 to 3.04	MPa	

Injection Notes

Generic
PPS - Glass Fiber\Mineral

This data represents typical values that have been calculated from all products classified as: Generic PPS - Glass Fiber\Mineral

This information is provided for comparative purposes only.

Notes

¹ Typical properties: these are not to be construed as specifications.

