

# TEDUR®

High-performance talent in plastic



**TEDUR®**, the exceptional talent among thermoplastics with excellent chemical resistance and high operating temperatures up to 240°C, offers several applications in different industries. Due to the low thermal expansion, TEDUR® can be used as an ideal replacement for metals, metal alloys and ceramics.

TEDUR® compounds based on linear PPS (polyphenylene sulfide) offer very good dimensional stability, even at temperatures above 200°C. Depending on the loads it can withstand service temperatures up to 240°C.

Additionally, TEDUR® is characterized by extremely low water absorption as well as very good resistance to chemicals and fuels. TEDUR® is a good insulator and has a low dielectric loss factor. With the innovation of TEDUR® HTR a PPS compound achieved the highest tracking resistance (CTI 600) for the first time and can be used in high voltage applications.

A large number of TEDUR® materials meet the requirements of V-0 according to UL94 without any addition of flame retardants. In order to this TEDUR® is predestined for the use in the E&E sector and for e-mobility.

There is a wide range of TEDUR® materials for automotive, transport, electrical industry, energy, machinery and equipment available. For special applications we gladly develop tailor-made products for you.

## TEDUR®: advantages at a glance

- Very high continuous operating temperatures (up to 240°C)
- Excellent hydrolysis, chemical and fuel resistance
- Very high rigidity and strength
- Low creep even at higher temperatures
- Flame retardant (V-0), without addition of flame retardant
- Very low water absorption
- Fill levels up to 80%
- Easy flow

**TEDUR®**

Product series	Material name	Fillers	Tensile modulus (MPa) ISO 527	Tensile stress (MPa) ISO 527	Tensile strain (%) ISO 527	IZOD-Impact (kJ/m <sup>2</sup> ) ISO 180/1U	Example applications
<b>PPS STANDARD</b>	TEDUR® L 9105-1	30% glass fibers	11600	170	38	2	Housings, sensor, holder, plug elements
	TEDUR® L 9107-1 U	40% glass fibers	15000	190	50	1.7	Housing, pump impellers, bushing
	TEDUR® L 9510-1 U	40% glass fibers	14000	180	40	1.5	Bushings, housings
	TEDUR® L 9511	45% Glasfaser	16500	180	33	1.4	Socket, bobbins, housing
	TEDUR® L 9114-1 S	60% glass fibers	24000	180	33	1	Pressure vessel, pump housing
	TEDUR® L 9200-1 U	60% glass fibers/minerals	17000	150	30	1.4	Crank shaft seal, tachograph
	TEDUR® L 9217-1 U	65% glass fibers/minerals	19000	140	25	1.2	Lamp socket, housing, holder
	TEDUR® L 9214-1	65% glass fibers/minerals	23000	150	25	1	Holder, housing
<b>PPS FOOD CONTACT / DRINKING WATER</b>	TEDUR® L FC 9510-5	40% glass fibers	15000	180	37	2	Pump parts, water meters
<b>PPS DETECTABLE</b>	TEDUR® DET PPS FC 2450 16075	45% glass fibers/ special filler	14500	-	25	-	Food industry (metal detection)
<b>PPS REFLECTOR</b>	TEDUR® L 9560 S	50% minerals	8500	75	15	1	Reflectors
	TEDUR® L 9523	60% glass fibers/minerals	20500	180	15	0.8	Reflectors
<b>PPS WEAR PROTECT</b>	TEDUR® L 9401-1	40% glass fibers 5% PTFE	14500	165	35	1.5	Sensors, slide bushing, housings
	TEDUR® L 9410-1	45% glass fibers/minerals 15% PTFE	15000	110	20	1	Sliding components, chain links
	TEDUR® L 9422-1	30% glass fibers 15% PTFE	12000	155	40	2.4	Sliding components, sliding bushing
<b>PPS E-CONDUCTIVE</b>	TEDUR® L 9400-1	15% carbon fibers	15500	150	16	1	Pump housings, bearing bush
	TEDUR® L 9404-3.2 U	30% carbon fibers	26500	190	28	0,8	Bearing bush, impellers, parts of pumps surface resistance: 100 Ohm
<b>PPS HIGH TRACKING RESISTANCE</b>	TEDUR® HTR PPS 2465 IM 16049	65% glass fibers/minerals	13500	85	16	1.2	Plug connectors CTI 600 thermal conductive: 1 W/mK
<b>PPS EXTRUSION</b>	TEDUR® L PPS 1000 15087	unreinforced	2100	50	1000	20	Pipe profile
<b>PPS RECYCLATE</b>	TEDUR® R 9519	ca. 45% glass fibers	16000	155	30	1.5	Socket, lamp socket, housing

**Additional products and information available on request.**

## HEAD OFFICE

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