

## Data sheet for powder coating with high-performance plastics

Coating material	Unit	ECTFE	ETFE	ETFE filled	PFA Ruby-Red	PVDF	PEEK
Recommended max. outside thickness of coating	[µm]	1500	1500	1200	1200	1200	1500
Recommended max. inside thickness of coating	[µm]	1200	1200	1000	800	600	800
Permanent temperature resistance	[°C]	150	150	150	250	150	260
Thermal load of the substrate during coating	[°C]	320	320	340	380	320	420
Thermal load of the substrate during de-coating	[°C]	420	420	420	550	420	550
Specific weight	[g/cm <sup>3</sup> ]	2.1	2.2	2.5	2.5	1.78	1.32
Impact resistance	[kJ/mm]	80	76	80	80	130	150
Hardness	[ShD]	75	73	81	83	77	99 [HRC M]
Tensile strength	[N/mm <sup>2</sup> ]	30	32	26	28	54	92
Elongation at break	[%]	220	240	140	170	80	50
Coefficient of friction	Stat; Dyn	0.8; 0.7	0.9; 0.7	0.7; 0.6	0.7; 0.6	0.22; 0.16	0.25; 0.21
Diffusion resistance, water 95°C, 600 µm	[h]	144	144	>400	>400	180	>400
Heat conductivity	[W/mK]	0.151	0.154	0.232	0.257	0.172	1.84
Resistance to wear		good	good	very good	very good	very good	excellent
Anti-adhesive properties		good	good	good	very good	good	good
Capacity for sterilisation		good	good	very good	very good	very good	excellent
Hydrophobia		good	good	good	very good	good	good
Dry lubrication		good	good	good	good	good	good
Solvent resistance		very good	very good	very good	very good	very good	very good
Suitability for foodstuffs		partially	partially	no	no	yes	yes
Acid and alkali resistance		very good	very good	very good	very good	very good	good