NORRES BAGGERMAN
Leading Performance.

Properties table - 1

		Unit / Standard	Ester-Polyurethane	Ether-Polyurethane	Soft PVC	Polyethylene	Thermoplastic rubber	NEOPRENE®	HYP (=CSM)	VITON®	Silicone	TEFLON® (=polytetrafluoroethylene)	Polyamide (moist)
	Abbreviation		PUR, TPU	PUR, TPU	PVC-P	PE	TPE, TPE-O	CR	CSM, PEC	FKM, FPM	Q	PTFE	PA
	Density	g/cm³ ISO 1183	1.18	1.11	1.22	0.92	0.98	1.23	1.27	1.80	1.15-2	2.15	1.13
Temperature range	permanent	°C	-40 to +90	-40 to +90	-20 to +70	-35 to +80	-40 to +125	-50 to +150	-40 to +170	-20 to +210	-70 to +260	-200 to +250	-40 to +90
	short term	°C	125	125	80	-	150	-	-	-	280	275	120
Mechanical properties	Tensile strength	N/mm² ISO 37	50-55	45-50	18	19	12					20	
	Elongation at break	% ISO 37	630	640	360	900	420					300	
	Tear strength	N/m DIN 53515	60-70	50-65	29		24						
	Abrasion resistance	mm³ ISO 4649	++ 25-40	++ 30-40	O 100	O	O 135	+	+	O	-	-	O
Resistances	Heat ageing		++	++	-	+	++	+	++	++	++	++	O
	Weathering		O	O	O	-	+	++	+	++	+	++	O
	UV radiation		O	O	O	-	+	++	+	++	+	++	O
	Microorganisms		-	++	++	+	O	+	++	++	O	++	+
	Water		++ ≤ 60 °C	++ ≤ 100 °C	++	++	++	+	++	++	++	++	+
	Salt solutions		O	O	++	++	++	++	++	++	+	++	+
	Acids		O	+	+	++	+	++	+	+	-	++	-
	Alkalis		O	+	+	++	+	++	+	-	-	++	+
	Oxidizing agents		-	-	O	-	O	++	+	++	+	++	-
	Solvents		-	-	-	+	O	-	-	-	-	++	-
	Mineral oil		++	++	-	+	++	O	+	++	-	++	+
	Petrol		++	++	-	+	++	O	O	++	-	++	+
Electrical properties	Surface resistance	Ω VDE 0303	10^{2}-10^{12}*	10^{3}-10^{12}*	10^{3}-10^{13}*	10^{2}-10^{17}*	10^{15}-10^{17}*	10^{9}-10^{12}	10^{4}-10^{14}*	10^{3}-10^{14}*	10^{13}-10^{16}*	10^{4}-10^{18}*	10^{10}-10^{12}
	Volume resistance	Ω cm VDE 0303	10^{2}-10^{12}*	10^{3}-10^{12}*	10^{3}-10^{13}*	10^{2}-10^{17}*	10^{15}-10^{17}	ca. 10^{12}	10^{4}-10^{14}*	10^{3}-10^{14}*	10^{13}-10^{16}*	10^{4}-10^{17}*	10^{12}-10^{15}
	Electric strength	kV/mm IEC 243	33	39	23	40-60	28		2-20	10-30	15-25	33	6-60
	Use with food		-	++*	-	++*	-	-	-	-	-	++*	-
	Varnishability / paintability		++	++	O	-	-	-	+	+	-	-	-
	Bondability		++	++	+	-	-	++	++	++	-	-	+

Classification: ++ excellent | + good | O limited | - poor |
* depending on the hose type

All stated dimensions, sizes and technical data are approximated figures based on a temperature of 20 °C. Subject to technical modifications.