

Partner of



Cutout material overview

CONTROLLED QUALITY

All indications correspond to internal and external laboratory examinations and are regularly checked and controlled during the manufacturing process. Slight deviations depend on consignments and are unavoidable. All details are subject to change.

- without additives
- ++ resistant
- * humid
- ** limited UV-constant
- / not measured
- o. Br. no failure

Material designation	Raw material	Trade name	Additives	Mechanical properties										Thermal properties										Electr. properties				Chemical resistance					
				Density DIN 53479	Tensile strength DIN 53455	Shore D hardness DIN 53505	Ball indentation hardness DIN ISO 2039 Teil 1	Ultimate tensile strength DIN 53455	Elongation at brea DIN ISO / R 527	Modulus of elasticity DIN 53457	Notched impact strength DIN 53453	Abrasion (sand slurry method)	Coefficient of friction	Dimensional stability under heat DIN 53461	Vicat softening temperature DIN 53460	Crystalline melting range (DTA)	Thermal conductivity at 23°C DIN 52612	Specific heat at 23°C	Coefficient of linear expansion at 23°C DIN 53752	Fire behaviour UL 49	Application temperature (min.)	Application temperature (dauernd)	Moisture absorption	Specific volume resistance DIN 53482	Surface resistance DIN 53482	Dielectric strength DIN 53481	Dielectric constant DIN 53485	Diluted acids	Diluted alkalines	Benzine	Ethylene glycol	Sulphuric acid (80%)	Chromic acid (50%), diluted
				g/cm³	N/mm²	Skala D	N/mm²	N/mm²	%	N/mm²	kJ/m²	%	μ	°C	°C	°C	$\frac{W}{K \cdot m}$	$\frac{KJ}{K \cdot Kg}$	$10^{-5} \cdot (1/K)$		°C	°C		Ω cm	Ω	kV/mm	bei 50 Hz						
St 1000®	PE-UHMW	Ticona GUR Braskem UTEC	—	0,93	27	64–67	38	40,5	400	700	> 80 -140	100	0,1 -0,2	47	79	130 -135	0,42	1,8	20	HB	-200	+80	<0,01	>10 ¹⁵	>10 ¹⁴	45	1,9	++	++	+	+	+	+
St 6000*** AST	PE-UHMW	Ticona GUR Braskem UTEC	Antistatic agent	0,93	25	64–70	38	36	350	700	> 70 -130	~110	0,25	47	79	130 -135	0,42	1,8	20	HB	-200	+80	<0,01	<10 ⁹	<10 ⁶	/	/	++	++	+	+	+	+
US 9200®	PE-UHMW	Ticona GUR Braskem UTEC	biodegradable Oil	0,94	18,4	65	27,4	/	> 360	700	≥ 70	~ 85	0,04	47	79	130 -135	0,42	1,8	20	HB	-200	+80	<0,01	/	/	/	/	++	++	+	+	+	+
St 9100Oil	PE-UHMW	Ticona GUR Braskem UTEC	Oil	0,93	22	60–65	30-35	41	≥ 200	700	≥ 80	~ 80	0,08	47	80	135 -138	0,4	1,8	20	HB	-200	+80	<0,01	>10 ¹⁵	>10 ¹³	45	/	++	++	+	+	+	+
St 9100Oil +	PE-UHMW	Ticona GUR Braskem UTEC	Oil	0,93	23	60–65	30-35	35	≥ 200	700	≥ 80	~75	0,09	47	80	135 -138	0,4	1,8	20	HB	-200	+80	<0,01	<10 ¹⁵	<10 ¹³	45	/	++	++	+	+	+	+
St 7000 EHT	PE-UHMW	Ticona GUR Braskem UTEC	Stabiliser	0,93	23	60–65	30-35	35	≥ 350	700	≥ 100	~ 80	0,12	47	80	130 -135	0,4	1,8	9	HB	-200	+100	<0,01	<10 ¹⁵	<10 ¹³	45	2,1	++	++	+	+	+	+
St 500®	PE-HMW	Lupolen Idealis	—	0,96	27	~70	46	25	100	1060	o. Br.	> 250	0,1 -0,2	47	80	130 -135	0,41	1,8	~20	HB	-100	+80	<0,01	<10 ¹⁵	<10 ¹³	40	2,9	++	++	+	+	+	+
A4®	PE-UHMW	Ticona GUR Braskem UTEC	—	0,94	27	64–68	40	30	200	900	> 30 -110	~130	0,2	47	79	130 -135	0,42	1,8	20	HB	-200	+80	<0,01	<10 ¹⁵	<10 ¹³	40	/	++	++	+	+	+	+
A4® G	PE-UHMW	Ticona GUR Braskem UTEC	—	0,95	18	64–68	40	37	max. 200	900	> 30 -110	~150	0,1 -0,2	47	79	130 -135	0,42	1,8	20	HB	-200	+80	<0,01	<10 ¹⁵	<10 ¹³	40	/	++	++	+	+	+	+
PA 6	Polyamide 6	Ultramid u. a.	—	1,14	80	81	160	80	> 50	2700	> 3	/	0,38	95	/	218	0,23	/	8	HB	-40	+100	~ 2,2	10 ¹²	10 ¹⁰	40	3,7	++	++	+	/	/	/
PA 6G	Cast-Polyamide 6	Ultramid u. a.	—	1,15	85	/	160	80	> 50	3100	> 4	/	0,36	/	/	220	0,23	/	8	HB	-40	+100	~ 2,2	10 ¹⁵	10 ¹³	40	3,7	++	++	+	/	/	/
PA 6 G + Oil	Cast-Polyamide 6	/	Oil	1,14	80	/	140	60	> 50	2700	> 5	/	0,18	/	/	220	0,23	/	8	HB	-40	+100	~ 2,2	10 ¹⁵	/	50	3,7	++	++	+	/	/	/
PTFE	Polytetra- fluoroethylene	Teflon	—	2,18	25–36	57	30	25	300	400	13	/	0,08	56	/	/	0,21	/	10	V-0	-200	+260	<0,01	10 ¹⁸	10 ¹⁷	40	2,0	++	++	+	/	/	/
POM-C	Polyoxy- methylen	Hostaform Ultraform	—	1,42	65	85	150	70	> 30	3200	> 10	/	0,32	/	/	175	0,31	1,46	10	HB	-50	+100	0,17	10 ¹⁵	10 ¹³	49	3,6	++	++	+	/	/	/
PETP	Polyethylen- terephthalate	Arnite	—	1,38	80	/	140	80	40	3000	> 4	/	0,25	/	/	255	0,24	/	8	HB	-20	+100	0,2	10 ¹⁶	10 ¹⁴	60	3,6	+	+	++	/	/	/
PETP-SP	/	/	Antiblocking agent	1,43	65	/	/	75	5	2200	2	/	0,20	/	/	255	0,23	1,5	8	HB	-20	+110	0,2	10 ¹⁶	10 ¹⁴	/	3,6	+	+	++	/	/	/