

ERTALYTE®

Polyethylene terephthalate (PET)

DSM Engineering Plastic Products' stock shapes made of crystalline thermoplastic polyester, are marketed under the trade names ERTALYTE (virgin grade) and ERTALYTE TX (filled grade).

Main characteristics:

- high mechanical strength, stiffness and hardness
- very good creep resistance
- low and constant coefficient of friction
- excellent wear resistance (comparable to or even better than nylon grades)
- very good dimensional stability (better than polyacetals)
- physiologically inert (suitable for food contact)

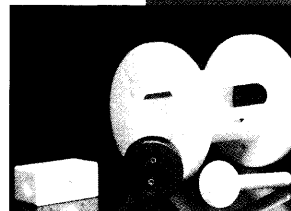
ERTALYTE (PET) natural (white) / black

The specific properties of this virgin crystalline PET make it specially suitable for the manufacture of mechanical precision parts which have to sustain high loads and/or are subject to wear.

ERTALYTE TX (PET + solid lubricant) (pale grey)

ERTALYTE TX is a polyethylene terephthalate compound incorporating a uniformly dispersed solid lubricant. Its specific formulation yields a premium, internally lubricated bearing-grade.

ERTALYTE TX has not only an outstanding wear resistance, but offers in comparison with ERTALYTE an even lower coefficient of friction as well as higher Pressure-Velocity capabilities.



ERTALYTE®

round rods

Diameters (mm)	Tolerances (1) on the diameters (mm)	Weights (2) - (kg/m)		
		ERTALYTE		ERTALYTE TX
		natural 40300000	black 40300100	ERTALYTE TX 40300200
10	+ 0.1 + 0.5	● 0.118	○ 0.118	● 0.122
12	+ 0.2 + 0.7	● 0.173	● 0.173	● 0.178
14		○ 0.233	○ 0.233	○ 0.240
15		● 0.266	○ 0.266	○ 0.274
16		● 0.302	● 0.302	● 0.311
18		● 0.380	○ 0.380	○ 0.391
20	+ 0.2 + 0.9	● 0.467	● 0.467	● 0.480
22		● 0.570	○ 0.570	○ 0.585
25		● 0.730	● 0.730	● 0.750
28		● 0.910	○ 0.910	○ 0.935
30		● 1.04	● 1.04	● 1.07
32	+ 0.2 + 1.1	● 1.19	○ 1.19	○ 1.22
36		● 1.50	● 1.50	● 1.54
40		● 1.84	● 1.84	● 1.90
45	+ 0.3 + 1.3	● 2.34	● 2.34	● 2.41
50		● 2.88	● 2.88	● 2.96
56		● 3.60	○ 3.60	○ 3.70
60	+ 0.3 + 1.6	● 4.15	● 4.15	● 4.26
65		● 4.85	○ 4.85	○ 4.99
70		● 5.62	● 5.62	● 5.78
75	+ 0.4 + 2	● 6.48	○ 6.48	○ 6.67
80		● 7.36	● 7.36	● 7.57
85	+ 0.5 + 2.2	● 8.32	○ 8.32	○ 8.56
90		● 9.31	● 9.31	● 9.58
100	+ 0.6 + 2.5	● 11.50	● 11.50	● 11.85
110	+ 0.7 + 3	● 13.95	● 13.95	● 14.35
120	+ 0.8 + 3.5	● 16.65	● 16.65	● 17.15
125		● 18.05	○ 18.05	○ 18.55
130	+ 0.9 + 3.8	● 19.55	● 19.55	● 20.10
140		● 22.60	○ 22.60	○ 23.25
150	+ 1 + 4.2	● 26.00	● 26.00	● 26.75
160	+ 1.1 + 4.5	● 29.60	-	○ 30.40
170	+ 1.2 + 5	● 33.45	-	○ 34.40
180		● 37.40	-	○ 38.50
190	+ 1.3 + 5.5	● 41.75	-	○ 42.95
200		● 46.15	-	○ 47.50
210	+ 1.3 + 5.8	● 50.90	-	-
Standard lengths (mm)		Tolerance (1) on the lengths (%)		
1000		0 + 3		
3000 (3)				

Ground rods up to 70 mm Ø as well as non-standard lengths (cut-to-size) : ○

(1) : tolerances according to DIN 16980

(2) : average production weights

(3) : not available for : ERTALYTE rods over 150 mm diameter
ERTALYTE TX rods over 100 mm diameter

● : **standard** item (available from stock or with short delivery time)

○ : **non-standard** item (manufactured on request)

- : not available

PRODUCT CODE

sheets

Thicknesses (mm)	Tolerances on the thicknesses (mm)	Weights (1) - (kg/m ²)	
		Standard sizes (2)	
		1000 x 1000 mm	
		1000 x 2000 mm	
		40300003	
2	- 0.15 + 0.15	■	2.87
3		■	4.30
4	- 0.20 + 0.20	■	5.70
5	- 0.25 + 0.25	■	7.12
6	- 0.30 + 0.30	■	8.55

(1) : average production weights

(2) : tolerances on width and lengths : 0 + 3 %

■ : standard item (available from stock or with short delivery time)

PRODUCT CODE

ERTALYTE natural / black
ERTALYTE TX

plates

Thicknesses (mm)	Tolerances (1) on the thicknesses (mm)	Weights (2) - (kg/m)			
		ERTALYTE		ERTALYTE TX	
		natural	black		
		40300004	40300104		40300204
8	+ 0.2 + 0.9	■ 7.59	■ 7.59	■ 7.81	
10		■ 9.37	■ 9.37	■ 9.64	
12		+ 0.3 + 1.5	■ 11.45	■ 11.45	■ 11.80
15			■ 14.10	□ 14.10	■ 14.50
16	■ 15.00		■ 15.00	□ 15.45	
18	■ 16.80		□ 16.80	■ 17.25	
20	■ 18.55		■ 18.55	■ 19.10	
25	■ 22.95		■ 22.95	■ 23.60	
30	+ 0.5 + 2.5	■ 27.90	■ 27.90	■ 28.70	
35		■ 32.30	□ 32.30	□ 33.25	
40		■ 36.75	■ 36.75	■ 37.80	
45		■ 41.15	□ 41.15	□ 42.35	
50		■ 45.60	■ 45.60	■ 46.90	
60		+ 0.5 + 3.5	■ 54.90	■ 54.90	■ 56.45
70	■ 63.75		□ 63.75	□ 65.55	
80	+ 0.5 + 5		■ 73.25	■ 73.25	■ 75.35
90		■ 82.10	□ 82.10	□ 84.45	
100		■ 90.95	■ 90.95	■ 93.55	
Standard sizes (mm)		Tolerances (1) on width and lengths			
610 x 1000		Width : + 5 mm + 25 mm			
610 x 3000		Lengths : 0 + 3 %			
Cut-to-size products : □					

(1) : tolerances according to DIN 16986

(2) : average production weights

■ : standard item (available from stock or with short delivery time)

□ : non-standard item (manufactured on request)

PRODUCT CODE

Diameters (mm) O.D. x I.D.		Tolerances (1) on the diameters (mm)		Weights (2) - (kg/m)		
				ERTALYTE	ERTALYTE TX	
		O.D.	I.D.	40300007	40300207	
20 x 12	+ 0.4	+ 1.1	- 0.4	- 1.1	○ 0.339	○ 0.349
25 x 15					○ 0.515	○ 0.530
30 x 20					○ 0.640	○ 0.660
36 x 25	+ 0.6	+ 2	- 0.6	- 2	○ 0.925	○ 0.950
40 x 30					⊗ 0.985	○ 1.01
45 x 30					○ 1.47	○ 1.52
50 x 40					○ 1.27	○ 1.30
55 x 45	+ 0.8	+ 2.5	- 0.8	- 2.5	⊗ 1.48	○ 1.53
60 x 30					○ 3.34	○ 3.44
65 x 50					○ 2.41	○ 2.48
70 x 30	+ 0.8	+ 3	- 0.8	- 3	○ 4.89	⊗ 5.03
40					○ 4.15	○ 4.27
75 x 60					⊗ 2.83	⊗ 2.91
80 x 40					○ 5.87	⊗ 6.03
50					⊗ 4.90	○ 5.04
60					○ 3.72	⊗ 3.82
90 x 40					⊗ 8.03	⊗ 8.25
50	+ 1.2	+ 3.6	- 1.6	- 5	○ 7.09	○ 7.30
60					⊗ 5.94	⊗ 6.11
70					○ 4.56	○ 4.69
100 x 40					⊗ 10.20	⊗ 10.50
50					○ 9.27	○ 9.53
60					⊗ 8.11	⊗ 8.35
80					○ 5.14	○ 5.28
115 x 50	+ 1.5	+ 4.5	- 2	- 6.5	⊗ 13.20	⊗ 13.60
70					○ 10.70	○ 11.00
90					⊗ 7.33	⊗ 7.54
125 x 50					○ 15.95	○ 16.40
80	+ 1.8	+ 5.4	- 2.2	- 7.5	⊗ 11.90	⊗ 12.20
140 x 70					○ 18.00	○ 18.50
90					⊗ 14.60	⊗ 15.05
160 x 80					○ 23.55	○ 24.25
100	+ 2	+ 6	- 2.5	- 8.5	⊗ 19.75	⊗ 20.35
180 x 80					⊗ 31.30	⊗ 32.20
100					○ 27.50	○ 28.30
140					○ 17.25	○ 17.75
200 x 100	+ 2	+ 6	- 2.5	- 8.5	○ 36.50	○ 37.50
140					⊗ 26.25	⊗ 27.00
160					○ 19.80	○ 20.35
Standard lengths (mm)					Tolerance on the lengths (%)	
1000					0	
3000					+ 3	
Non-standard lengths (cut-to-size) : ⊗						

(1) : tolerances according to DIN 16809

(2) : average production weights

○ : **standard** item (available from stock or with short delivery time)

○ : **non-standard** item (manufactured on request)

PRODUCT CODE