

## PE-HMW Plastics

### MULTILENE PE500 Plastics for industry

Characteristics and standard values	PE 500 (PE-HMW)					PE 500 Reg.			
	natural	coloured	UV-black	antistatic (AST)		Reg. coloured		Reg. black multi-col.	Reg. coarse multi-col.
<b>Mechanical Properties</b>									
Density ISO 1183-A	<b>g/cm<sup>3</sup></b>	0,95	0,95	0,95	0,96		0,95	0,96	0,96
Notched Impact strength (Charpy) ISO 11542-2	<b>kJ/m<sup>2</sup></b>	25	10 - 20	10 - 20	10 - 20		10-20	10-15	10-15
Abrasion - Internal method acc. to DIN 58836 (Slurry-Test rel. to GUR 4120 = 100 %)	<b>%</b>	400	400	400-450	400-450		400-450	400-500	400-500
Tensile strength at yield ISO/R 527 50 mm/min.	<b>N/mm<sup>2</sup></b>	26	20 - 26	20 - 26	15 - 20		15 - 20	10 - 20	10 - 20
Break elongation ISO/R 527 50 mm/min.	<b>%</b>	> 50	> 50	> 50	> 50		> 50	> 50	> 50
Creep properties under varying compressive stress Creep < 10 % in 7 days – (20°C)	<b>N/mm<sup>2</sup></b>	10	10	10	10		10	10	10
Dynamic value of friction PE-Metall P <sub>m</sub> = 2 N/mm <sup>2</sup> v = 10m/min	<b>1</b>	0,2	0,2	0,2	0,2		0,2	0,2	0,2
Shore D, 3-s-value 6mm plate ISO 868		65	65	65	65		63	64-65	64-65
Waterabsorbtion	<b>%</b>	< 0,1	< 0,1	< 0,1	< 0,1		< 0,1	< 0,1	< 0,1
<b>Thermal Properties</b>									
Melt temperature DSC ISO 3146	<b>°C</b>	133-135							
Permanente operation temperature, max.	<b>°C</b>	80							
Coefficient of linear expansion DIN 53752 23 - 80 °C		1 2*10 <sup>-4</sup> /K							
<b>Electrical Properties</b>									
Volume resistivity IEC 60093 / VDE 0303 Part 30	<b>8*cm</b>	>10 <sup>14</sup>	<10 <sup>14</sup>	≤10 <sup>9</sup>	≤10 <sup>6</sup>		<10 <sup>14</sup>	<10 <sup>12</sup>	<10 <sup>14</sup>
Surface resistivity IEC 60093 / VDE 0303 Part 30	<b>8</b>	>10 <sup>13</sup>	<10 <sup>13</sup>	≤10 <sup>9</sup>	≤10 <sup>9</sup>		<10 <sup>13</sup>	<10 <sup>11</sup>	<10 <sup>13</sup>

The above data are based on the present knowledge and are given without guarantee. Black sheets may have antistatic properties. Existing laws and conditions are to be respected by the user of our products.