

## Material Data Sheet











---

# POM LX blue










Chemical Designation : Polyoxymethylen (Copolymer)  
 DIN-Abbreviation: POM-C  
 Colours, fillers: blue, solid lubricant

---

### Main features

-  very good sliding properties
  -  rigid
  -  resistant to numerous detergents
  -  tough
  -  good electrical insulation
  -  wear resistant
  -  strong
  -  resistant to xxx acids
  -  difficult to bond
  -  easily machined
- 

### Preferred Fields

-  mechanical engineering
  -  transport and conveyor technology
  -  electrical engineering
  -  process technology
  -  dispensing machinery
  -  automotive engineering
  -  textile machinery
  -  precision engineering
  -  packaging and paper processing machinery
- 

### Applications

Friction bearings, friction strips, gears, seals, wiper blades, insulating bushes, chain guides, rollers

---

### Properties

---

Material Data Sheet	POM LX blue		
<b>Mechanical</b>	<b>dry / moist</b>		<b>standard</b>
Tensile strength at yield	45	MPa	DIN EN ISO 527
Elongation at yield	25	%	DIN EN ISO 527
Modulus of elasticity in tension	1600	MPa	DIN EN ISO 527
Modulus of elasticity after flexural test	2100	MPa	DIN EN ISO 178
Hardness	90		ISO 2039/1 (Kugeldruck-Härte, 358N)
Impact strength 23° C (Charpy)	>40	KJ/m <sup>2</sup>	DIN EN ISO 179 (Charpy)
Co-efficient of friction <small>p = 0,05 N/mm<sup>2</sup>v=0,6 m/s on steel, hardened and ground</small>	~0,2		

---

<b>Thermal</b>	<b>dry / moist</b>		<b>standard</b>
Glass transition temperature	-60	°C	DIN 53 765
Heat distortion temperature HDT, Method A	88	°C	ISO-R 75 Verfahren A (DIN 53 461)
<b>Max. service temperature</b>			
short term	140	°C	
long term	100	°C	
Specific heat (23° C)	1,5	J/g.K	
Coefficient of thermal expansion (23-55°C)	16	10 <sup>-5</sup> 1/K	DIN 53 752

Material Data Sheet

POM LX blue

<b>Electrical</b>	<b>dry / moist</b>		<b>standard</b>
Dielectric constant (10 <sup>6</sup> Hz)	3,8		DIN 53 483, IEC-250
Dielectric loss factor (10 <sup>6</sup> Hz)	0,007		DIN 53 483, IEC-250
Specific volume resistance	7*10 <sup>13</sup>	Ω*cm	DIN IEC 60093
Surface resistance	9*10 <sup>13</sup>	Ω	DIN IEC 60093
Dielectric strength	35	kV/mm	DIN 53 481, IEC-243, VDE 0303 Teil 2
Resistance to tracking	CTI 600		DIN 53 480, VDE 0303 Teil 1

Material Data Sheet

POM LX blue

<b>Miscellaneous</b>	<b>dry / moist</b>		<b>standard</b>
Density	1,35	g/cm <sup>3</sup>	DIN 53 479
Moisture absorption (23°C/50RH)	0,2	%	DIN EN ISO 62
Water absorption to equilibrium	0,8	%	DIN EN ISO 62
Flammability acc. to UL standard 94	HB		
Resistance to hot water, washing soda:	(+)		
Resistance to weathering	-		

(1) Testing of semi-finished products

All information supplied by or on behalf of Merrem Materials or Merrem Kunststoffen in relation to its products, in any form, is supported by research and believed to be reliable, but Merrem Materials or Merrem Kunststoffen assumes no liability whatsoever in respect of application, processing or use made of the aforementioned information or products, or any consequence there of. The buyer undertakes all liability in respect of the application, processing or use of the aforementioned information or product, whose quality and other properties he shall verify, or any consequence there of. No liability whatsoever shall attach to Merrem Materials or Merrem Kunststoffen for any infringement of the rights owned or controlled by a third party intellectual, industrial or other property by reason of the application, processing or use of the aforementioned information or products by the buyer.