

## PA12 80x1000 mm black

Article No. P1000220

### 1. Technical Data Sheet

Property	Value	Unit	Test standard
Density	1.04	g/cm <sup>3</sup>	
Water absorption to saturation	3	%	ISO 62
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Tensile Strength	66	MPa	ISO 527
Modulus of elasticity (tensile)	1470	MPa	ISO 527
Breakdown Voltage	45	MPa	ISO 527
Break Elongation	50	%	ISO 527
Flexural Strength	53	MPa	DIN EN ISO 527-2
Notched impact strength (Charpy)	7	kJ/m <sup>2</sup>	DIN EN ISO 179-1
Hardness Shore D	83	° Shore D	ISO 868
Ball pressure hardness	90	MPa	ISO 2039
Melting point	180	°C	DIN EN ISO 11357
Maximal operating temperature (short-term)	133	°C	UL746B
Maximum Operating Temperature	110	°C	
Heat deflection temperature (HDT/A)	115	°C	ISO 75
Heat deflection temperature (HDT/B)	135	°C	ISO 75
Vicat softening temperature (VST/B/50)	50	°C	ISO 306
Thermal Expansion Coefficient	0.9	10 <sup>-4</sup> /K	ISO 11359
Dielectric Strength	34	kV/mm	IEC 60243-1
Volume Resistivity	10 <sup>11</sup>	Ω	IEC 60093
Dielectric Constant (1 MHz)	1	-	IEC 60250
Dielectric loss factor (1 MHz)	1	-	IEC 60250
Surface Resistivity	~10 <sup>13</sup>	Ω	IEC 60093
Comparative Tracking Index (CTI)	600	V	IEC 60112
Flammability Classification (UL 94)	60695		UL 94

## 2. Chemical Resistance

● Resistant ● Partially resistant ● Not resistant

Chemical	Concentration	Resist.
1,4-Dioxane	100	●
2-Hydroxypropionic acid (lactic acid)	90	●
Acetone	100	●
Ammonia	conc.	●
Ammonium chloride	—	●
Amyl alcohol	—	●
Apple juice	—	●
Benzene	—	●
Bleaching solution	12.5 cl	●
Boric acid	100	●
Brake fluid	—	●
Butyl acetate	—	●
Calcium chloride	—	●
Carbon disulphide	100	●
Carbon tetrachloride	—	●
Chlorine (gas)	100	●
Chlorobenzene	100	●
Chloroform	—	●
Citric acid	10	●
Cresol	—	●
Cyclohexanone	100	●
Cyclohexene	100	●
Diesel	—	●
Diethylene oxide	—	●
Ethyl acetate	100	●
Ethyl alcohol (ethanol)	96	●
Ethylene chloride	100	●
Food oil	—	●
Formaldehyde (aqueous)	40	●
Formic acid	10	●

Chemical	Concentration	Resist.
Fuel (aromatic free)	–	●
Fuel oil	–	●
Glycerine	100	●
Glycol	100	●
Heptane	100	●
Hydrochloric acid	10	●
Hydrochloric acid (concentrated)	conc.	●
Hydrofluoric acid	40	●
Hydrogen peroxide	10	●
Hydrogen sulfide (aqueous)	–	●
Isopropyl alcohol	100	●
Linseed oil	–	●
Mercurochrome	–	●
Methyl alcohol (methanol)	100	●
Methyl ethyl ketone (MEK)	100	●
Methylene chloride	100	●
Milk	–	●
Mineral oils (aromatic free)	–	●
Nitric acid	50	●
Nitric acid	10	●
Nitrobenzene	–	●
Oxalic acid	–	●
Ozone (gas)	≤ 0.5 ppm	●
Paraffin oil	100	●
Perchloroethylene	–	●
Petroleum	100	●
Petroleum ether	100	●
Phenol (aqueous)	ca. 9	●
Phosphoric acid	50	●
Potassium hydroxide solution	50	●
Premium fuel	–	●
Propyl alcohol	–	●

Chemical	Concentration	Resist.
Pyridine	–	●
Silicone oil	–	●
Sodium carbonate (aqueous)	–	●
Sodium chloride (aqueous)	–	●
Sodium hydroxide solution (caustic soda)	15	●
Sodium nitrate (aqueous)	–	●
Sodium thiosulfate	–	●
Sulphuric acid	96	●
Tetrahydrofuran (THF)	100	●
Toluene	100	●
Transformer oil	–	●
Trichloroethylene	100	●
Vinegar (standard)	5 - 10	●
Water	–	●
Xylene	–	●