



## Complete Technical Documentation

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### POM C FG 115x1000 mm traffic blue

Article No. P1006353

#### 1. Technical Data Sheet

| Property                                   | Value            | Unit                | Test standard    |
|--------------------------------------------|------------------|---------------------|------------------|
| Density                                    | 1.24             | g/cm <sup>3</sup>   | ASTM D792        |
| Water absorption to saturation             | 2.2              | %                   | ASTM D955        |
| Water Absorption to Saturation             | 0.5              | %                   | ASTM D570        |
| Tensile Strength                           | 51               | MPa                 | DIN EN ISO 527-2 |
| Modulus of elasticity (tensile)            | 1200             | MPa                 | ASTM D790        |
| Breakdown Voltage                          | 76.5             | MPa                 | ISO 527          |
| Break Elongation                           | 300              | %                   | ASTM D638        |
| Flexural Strength                          | 58               | MPa                 | ASTM D638        |
| Notched impact strength (Charpy)           | 6                | kJ/m <sup>2</sup>   | DIN EN ISO 179-1 |
| Impact Resistance (Charpy)                 | 19               | kJ/m <sup>2</sup>   | ISO 179/1eU      |
| Hardness Shore D                           | 83               | ° Shore D           | ISO 868          |
| Ball pressure hardness                     | 230              | MPa                 | ISO 2039-1       |
| Melting point                              | 222              | °C                  | ISO 3146         |
| Maximal operating temperature (short-term) | 129              | °C                  | UL746B           |
| Maximum Operating Temperature              | 90               | °C                  |                  |
| Minimum temperature                        | -46.25           | °C                  |                  |
| Heat deflection temperature (HDT/A)        | 105              | °C                  | ASTM D648        |
| Heat deflection temperature (HDT/B)        | 155              | °C                  | ISO 75           |
| Vicat softening temperature (VST/B/50)     | 50               | °C                  | ISO 306          |
| Thermal Conductivity                       | 0.3              | W/(m·K)             | DIN 52612        |
| Thermal Expansion Coefficient              | 0.4              | 10 <sup>-4</sup> /K | ISO 11359        |
| Dielectric Strength                        | 85               | kV/mm               | IEC 60243-1      |
| Volume Resistivity                         | 10 <sup>12</sup> | Ω                   | IEC 60093        |
| Dielectric Constant (1 MHz)                | 3.7              | -                   | IEC 60250        |
| Dielectric loss factor (1 MHz)             | 0.0              | -                   | IEC 60250        |



| Chemical                         | Concentration | Resist. |
|----------------------------------|---------------|---------|
| Ethyl alcohol (ethanol)          | 96%           | ●       |
| Food oil                         | —             | ●       |
| Formaldehyde, aqueous            | 40%           | ●       |
| Formic acid                      | 10%           | ●       |
| Frost protection agent           | —             | ●       |
| Fuel oil                         | —             | ●       |
| Fuel, aromatic free              | —             | ●       |
| 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                      | 10%           | ●       |
| Nitric acid (50%)                | 50%           | ●       |
| Nitrobenzene                     | —             | ●       |
| Oxalic acid                      | —             | ●       |
| Ozone (gas)                      | ≤0.5 ppm      | ●       |
| Paraffin oil                     | 100%          | ●       |
| Perchloroethylene                | —             | ●       |
| Petroleum                        | 100%          | ●       |
| Petroleum ether                  | 100%          | ●       |

| Chemical                        | Concentration | Resist.     |
|---------------------------------|---------------|-------------|
| Phenol, aqueous                 | ca. 9%        | <div></div> |
| Phosphoric acid                 | 50%           | <div></div> |
| Potassium hydroxide solution    | 50%           | <div></div> |
| Premium fuel                    | —             | <div></div> |
| Propyl alcohol                  | —             | <div></div> |
| Silicone oil                    | —             | <div></div> |
| Sodium carbonate, aqueous       | —             | <div></div> |
| Sodium chloride, aqueous        | —             | <div></div> |
| Sodium hydrogen sulfite         | —             | <div></div> |
| Sodium hydroxide solution (15%) | 15%           | <div></div> |
| Sodium hydroxide solution (60%) | 60%           | <div></div> |
| Sodium nitrate, aqueous         | —             | <div></div> |
| Sulphuric acid                  | 96%           | <div></div> |
| Tetrahydrofuran (THF)           | 100%          | <div></div> |
| Toluene                         | 100%          | <div></div> |
| Transformer oil                 | —             | <div></div> |
| Trichloroethylene               | 100%          | <div></div> |
| Vinegar, standard               | 5-10%         | <div></div> |
| Water                           | —             | <div></div> |
| Xylene                          | —             | <div></div> |