

# PP Satin Gauze

**Formula:** PP

**Thickness:** 0.37mm

**Length 1:** 500mm

**Length 2:** 500mm

**Product Shape:** Satin

**Weave:** Satin

**Threads/cm:** 70

**Open Area:** 4%

**Nominal Aperture (Microns):** 34

**Monofilament Diameter:** 150 $\mu$ m

**CAS Number:** 9003-07-0

**UOM Code:** 190-032-94

**SKU:** 1000074261-group

**Product Code:** PP30-MS-000106

## Material Properties for Polymers

### Chemical Resistance

Element	Value
Acids - concentrated	Good-Fair
Acids - dilute	Good-Fair
Alcohols	Good
Alkalis	Good
Aromatic hydrocarbons	Fair
Greases and Oils	Good-Fair
Halogenated Hydrocarbons	Good-Poor
Halogens	Poor
Ketones	Good

### Mechanical Properties

Element	Value
Coefficient of friction	0.1-0.3
Hardness - Rockwell	R80-100
Elongation at break( % )	150-300, for biax film >50
Tensile modulus( GPa )	0.9-1.5, for biax film 2.2-4.2

<b>Element</b>	<b>Value</b>
Izod impact strength( J m <sup>-1</sup> )	20-100
Abrasive resistance - ASTM D1044( mg/1000 cycles )	13-16
Tensile strength( MPa )	25-40, for biax film 130-300,

## **Electrical Properties**

<b>Element</b>	<b>Value</b>
Dielectric constant @1MHz	2.2-2.6
Dissipation factor @ 1MHz	0.0003-0.0005
Dielectric strength( kV mm <sup>-1</sup> )	30-40
Surface resistivity( Ohm/sq )	10 <sup>13</sup>
Volume resistivity( Ohmcm )	10 <sup>12</sup> -10 <sup>14</sup>

## **Physical Properties**

<b>Element</b>	<b>Value</b>
Flammability	HB
Radiation resistance	Fair
Refractive index	1.49
Resistance to Ultra-violet	Poor
Limiting oxygen index( % )	18
Water absorption - equilibrium( % )	0.03
Density( gcm <sup>-3</sup> )	0.9

## **Thermal Properties**

<b>Element</b>	<b>Value</b>
Heat-deflection temperature - 0.45MPa( C )	100-105
Heat-deflection temperature - 1.8MPa( C )	60-65
Lower working temperature( C )	50
Upper working temperature( C )	90-120
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	1700-1900
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	0.1-0.22@23°C
Coefficient of thermal expansion( x10 <sup>-4</sup> K <sup>-1</sup> )	100-180