

# Material Data Sheet P101-WE

## Polyacetal P101 – white (FDA)

### General

P101-WE is a white (natural) Polyacetal commonly referred to as POM (Polyoxymethylene) or Acetal. The material has excellent physical and chemical properties to serve a wide range of applications. P101-WE is very stable in wet and dry environments and is recommended for precision parts, where close tolerances are required.

Polyacetal P101 – white is approved for the use of applications in contact with foodstuff.

### Physical properties

Density:	DIN 53479	g/cm <sup>3</sup>	1,41
Moisture absorption:	23°C / 50% rel. M.	%	0,2
Moisture absorption:	water 23°C	%	0,85
Tensile strength:	DIN 53455	N/mm <sup>2</sup>	68-70
Elongation at break:	DIN 53455	%	35
Modulus of elasticity:	DIN 53457	N/mm <sup>2</sup>	3300
Ball Hardness H358/3:	DIN 53456	N/mm <sup>2</sup>	140
Coefficient of sliding:		μ	< 0,4
Melting temperature:		°C	164 - 167
Min. service temperature:		°C	-50
Max. service temperature:		°C	100

### Chemical resistance

Water up to 90°	R	Alcohols	R
HFA, HFB, HFC fluids	R	Ozone	U
HFD	U	Air up to 100°	R
Mineral oils	R	Air up to 150°	U
Vegetable oils	R		
Fuels	R		

**Key to chemical resistance:** R = resistant S = suitable U = unsuitable

### Main application

Guide rings, bushings, back-up rings, scrapers, housings, high precision parts.

### Analysis and Evaluation

The properties relate to fundamental values of Polyacetal. Products values mentioned above are corresponding to ASTM or DIN standard and have been tested on standardized plates in the laboratory.