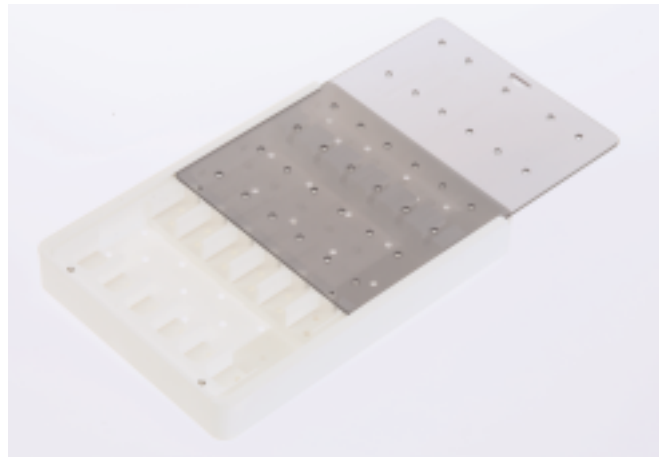
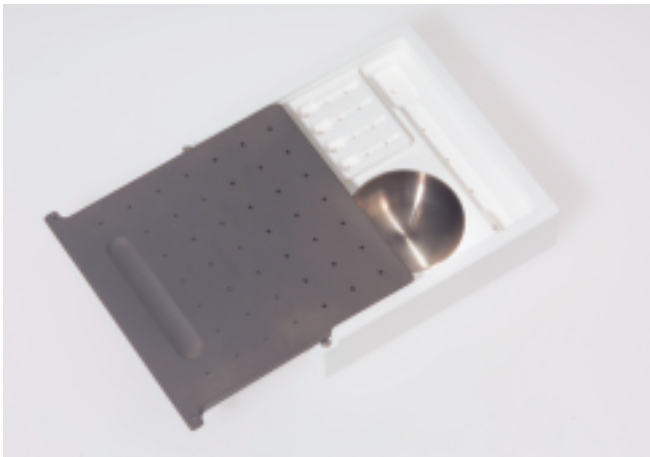


**TECAPRO MT**  
**Dimensionally stable and light weight.**  
**Resistant to chemicals with stable colour.**



Surgical trays made of TECAPRO MT.

Sterilisation containers, eg, for surgical instruments have to provide high dimensional stability, especially throughout repeated sterilisation cycles. Due to a special stabilisation process, TECAPRO MT shows a better resistance to higher temperatures than standard polypropylene. Compared to other materials, eg, stainless steel and PTFE, TECAPRO MT possesses a much lower density which results in a reduced weight of the component parts. Standard colour is white, however, other colours can be produced according to customer preferences.

**Preferred fields**

Medical technology and food processing

**Applications**

Surgical trays, surgical related equipment, implant trials

**Properties**

- | Good resistance to cleaning agents and disinfectants
- | Can be repeatedly sterilised with hot steam
- | High dimensional stability
- | Good machinability
- | Laser marking possible
- | FDA conformity of raw material and colour pigments

TECAPRO MT is also available as TECAPRO SAN with an antimicrobial additive to provide additional safety.

**Very stable after exposure to chemicals**

Exposure in two different chemical systems for cleaning and hot steam autoclaving:

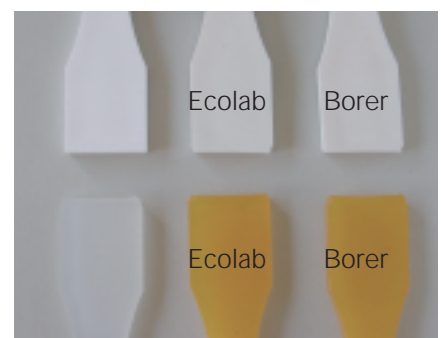
- | Ecolab chemistry
- | Boxer chemistry
- | 300 cycles of exposure

The comparison between TECAPRO MT and TECAFINE PP shows good resistance to chemical agents. Minimal property variation of TECAPRO MT in the Ecolab and Borer tests.

- | no optical changes
- | no serious changes in mechanical properties

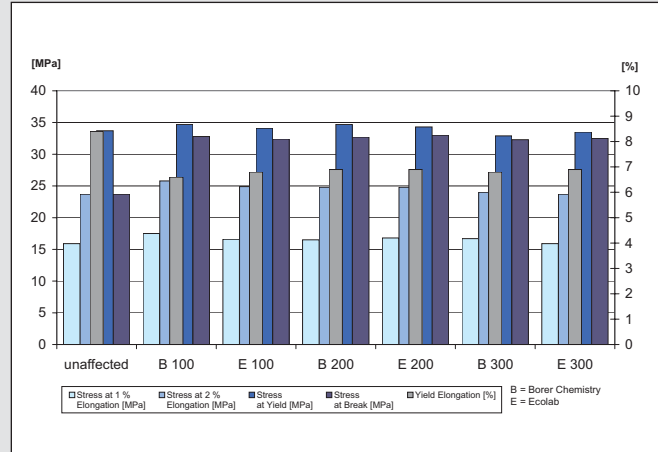
For further information on mechanical properties see reverse.

TECAPRO MT  
white



TECAFINE PP  
neutral

Standard values	Unit	TECAPRO MT
DIN-abbreviation		PP
Density (ASTM D 792, DIN 53 479)	$\rho$ g/cm <sup>3</sup>	0,92
Tensile strength at yield (ASTM D 638, DIN EN ISO 527)	$\sigma_S$ MPa	35
Elongation at yield (ASTM D 638, DIN EN ISO 527, ASTM D 1708 (a))	$\epsilon_S$ %	12
Modulus of elasticity, after tensile test	$E_Z$	
Modulus of elasticity, after flexural test (ASTM D 790, DIN EN ISO 178)	$E_B$ MPa	1470
Hardness Ball Indentation: ISO 2039/1, Shore D: ASTM D 2240, DIN 53 505 (d), Rockwell: ASTM D 785 , ISO 2039/2 (r), others: ASTM D 785 (a), DIN 43 456 (s)	$H_K$ MPa	100(r)
Impact resistance (DIN EN ISO 179, Izod: ASTM D 256, DIN EN ISO 180 (i), Charpy: DIN EN ISO 179 21, notch Impact strength: DIN 53 456 (k))	$a_n$ kJ/m <sup>2</sup>	0,69 (i)
Melting point (DIN 53 736)	$T_m$ °C	163
Heat distortion temperature (DIN 53 461) acc. to ISO-R 75 method A	HDT/A °C	86
Maximum service temperature short term long term	°C °C	140 100
Coefficient of linear thermal expansion (23 °C, ASTM D 696, DIN 53 752, ASTM E 831)	$\alpha$ 10 <sup>-5</sup> 1/K	
Volume resistance (ASTM D 257, EC 93, DIN IEC 60093)	$R_D$ $\Omega \cdot \text{cm}$	>10 <sup>14</sup>
Dielectric strength (ASTM D 149, IEC-243, VDE 0303 part 2)	$E_d$ kV/mm	>40
Moisture absorption at equilibrium 23 °C / 50% rel. humidity (DIN EN ISO 62)	$W(H_2O)$ %	<0,1
Flammability acc. to UL-Standard 94		HB



TECAPRO MT after 300 cycles of exposure for medical devices in alkaline cleaning system and hot steam sterilisation at 134 °C.

## Stocklist

### Plates



Tolerance mm	TECAPRO MT white	TECAPRO MT black
		PP
DIN-Abbreviation	PP	PP
Density (g/cm <sup>3</sup> )	0,92	0,92
Size		
mm	kg/m	kg/m
12,7 x 610 (1/2" x 24")	7,43	7,43
25,4 x 610 (1" x 24")	14,63	14,63
38,1 x 610 (1 1/2" x 24")	21,83	21,83
50,8 x 610 (2" x 24")	29,03	29,03
63,5 x 610 (2 1/2" x 24")	36,23	36,23

The specified kg/m weights are purely arithmetic figures. Weight on delivery will deviate from the figures given above. Stock lengths 1220 mm, other delivery lengths possible. All figures given without obligation.

- = Stock item
- = Non-stock item – special production

Please find further information on general delivery terms and conditions of the company in our brochure Semi-finished Plastic Products or on our website: [www.ensinger-online.com](http://www.ensinger-online.com).