



### Our Know-how – Your Advantage

In the pharmaceutical sector, rubber stoppers are still often used, but are increasingly being replaced: Further developed, special TPEs can take the lead in closure applications with piercing requirements. In addition, TPEs without reactive crosslinking are considered purer. Another plus: the possibility of a multi-component adhesion with a plastic cap creates a hermetically secure seal.

- Thermoplastic processing is possible
- Medical grades acc. VDI 2017
- Adhesion to cap material - hermetic sealing against bioorganisms
- Penetration forces variable
- No interaction with polar active pharmaceutical ingredients
- Sterilizable according to current pharmaceutical and medical standards (Autoclave 121°C,  $\beta$ -/ $\gamma$ -radiation 2x35 kGy, EtO)
- Adhesion to PP and PE
- Very good resealing properties
- Free of silicone, latex, PVC and phthalates
- Free from animal ingredients

### Application Specialist Oliver Kluge:

“Thermoplastic materials can produce higher levels of automation. In the end, these lead to a clean product that is recyclable and offers technical advantages in assembly to boot. Our TPE products are therefore an excellent fit for the packaging products we are targeting, which are made exclusively of thermoplastic materials.”

### Typical Applications

- Closure caps for IV bottles and bags
- Closure caps for vials
- Membranes, that need to be penetrated



### Technical Data

Further development for Medical Resealing		HTM8510/197	HTM8510/262	HTM8510/250	HTM8510/337
Hardness	Sh A	36	43	44	44
Density	g/cm <sup>3</sup>	0,887	0,889	1,142	1,127
Tensile strength	MPa	9,35	10,19	6,41	6,40
Elongation at break	%	776	908	814	502
Tear resistance	N/mm	13,2	13,4	16,7	14,3
CS 72h/23°C	%	16	20	15	12
CS 24h/70°C	%	26	42	49	22
Optimized for		Needle	Spike	Spike	Needle
Optimized for sterilization also with autoclave				✓	✓
Color		translucent	translucent	nature	grey

### TALK TO OUR EXPERTS!

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