

# HEROCOMP PTFE COMPOUNDS EK SERIES PTFE+AROMATIC POLYESTER



**Herocomp EK** is a **polytetrafluoroethylene (PTFE)** compound series filled with **linear crystalline Aromatic Polyester**.

Aromatic Polyester is added into high quality Virgin PTFE in different percentages in order to fulfill specific customer requirements. The family of **EK Compounds** is particularly suitable for **rotating and dynamic applications where temperature and wear resistance** is required even in **dry running conditions**. **Herocomp EK Series** is also recommended for application with **soft mating countersurface** such as aluminum plastics, etc.

## MAIN BENEFITS

- ✓ Excellent resistance to high temperatures
- ✓ Very good corrosion and abrasion resistance
- ✓ Excellent wear resistance
- ✓ High dimensional stability
- ✓ Food contact compliant

## PROCESSING

- ✓ Compression moulding
- ✓ Automatic moulding
- ✓ Isostatic moulding
- ✓ RAM extrusion

## APPLICATIONS

- ✓ Self-lubricating and slide bearings
- ✓ Sealing elements
- ✓ Compressor rings
- ✓ Spring-loaded seals
- ✓ Packing sets
- ✓ Rotors or vanes of process pumps
- ✓ Bushings

Herocomp EK Series includes compounds with **different percentages of filler and formulation up to 30% or even more upon request**.

These compounds can also be formulated with **Virgin Modified PTFE** polymer base. Herocomp EK Series available grades are: **Non Free-Flowing (NFF)**, **Free-Flowing (FF)**, **Free-Flowing High Density (FF/HD)** and **Pre-Sintered (E)**.

Possibility to develop special EK Compounds using Aromatic Polyester in combination with **pigments** and other reinforcements fillers such as **Graphite, Glass Beads, Carbon Fibers, Carbon, MoS<sub>2</sub>, etc.**

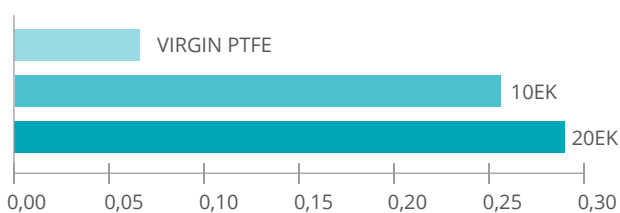


PROPERTY	TEST METHOD	UNIT	NFF	FF	FF/HD	E
<b>HEROCOMP 10EK</b>						
Bulk Density	ASTM D4894	g/l	400	600	650	700
Specific Gravity	ASTM D4894	-	2,07 +/- 0,03	2,07 +/- 0,03	2,07 +/- 0,03	2,07 +/- 0,03
Tensile Strength	ASTM D4894	MPa	24	22	20	16
Elongation	ASTM D4894	%	320	290	270	180
Hardness	NEEDLE	Shore D	60 +/- 3	60 +/- 3	60 +/- 3	60 +/- 3
Diametric Shrinkage	INTERNAL	%	2,5 +/- 0,5	2,5 +/- 0,5	2,5 +/- 0,5	-
<b>HEROCOMP 20EK</b>						
Bulk Density	ASTM D4894	g/l	400	600	650	700
Specific Gravity	ASTM D4894	-	1,97 +/- 0,03	1,97 +/- 0,03	1,97 +/- 0,03	1,97 +/- 0,03
Tensile Strength	ASTM D4894	MPa	18	15	12	10
Elongation	ASTM D4894	%	240	220	170	130
Hardness	NEEDLE	Shore D	61 +/- 3	61 +/- 3	61 +/- 3	61 +/- 3
Diametric Shrinkage	INTERNAL	%	2,3 +/- 0,5	2,3 +/- 0,5	2,3 +/- 0,5	2,3 +/- 0,5

*These are Typical Values not suitable for specification purposes*

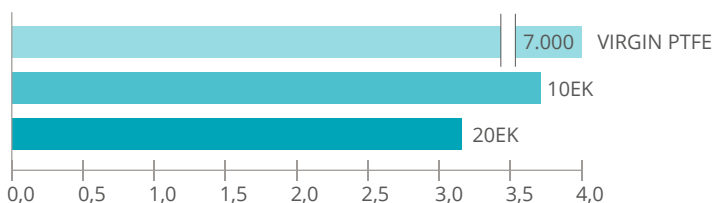
**NFF:** Non Free-Flowing grade for Compression Molding  
**FF:** Free-Flowing grades for Compression and Isostatic Molding  
**FF/HD:** Free-Flowing High Density grade for Compression and Automatic Molding  
**E:** Pre-sintered grade for RAM Extrusion

### Coefficient of Friction



### Factor K (Pin on Ring: Speed 4 m/s Load 3,5 bar)

$\times 10^{-7} \text{mm}^3/\text{N.m}$



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