

KLINGER®top-chem 2003

KLINGER®top-chem 2003 is a PTFE material filled with hollow glass microsphere, providing high adaptability and tightness even at low surface loads. Its chemical properties make it the ideal choice for strongly acidic and alkaline applications as well as for medium temperatures and loads.

TECHNICAL DATA SHEET

KLINGER®top-chem 2003

PHYSICAL PROPERTY	TEST METHOD	UNIT	VALUE
Color	--	--	White
Basis Composition	PTFE filled with hollow glass-microspheres		
Compressibility	ASTM F 36 M	%	18
Recovery	ASTM F 36 M	%	35
Stress Relaxation DIN 52913	30 MPa, 16 h/150°C	MPa	13
KLINGER Cold/Hot Compression (25 MPa)	Thickness decrease at 23°C	%	10
	Thickness decrease at 260°C	%	39
Tightness	DIN 28090-2	mg/(s x m)	0.01
Specific Leakrate	VDI 2440	mbar x l/(s x m)	3.29E-06
Thickness/Weight Increase	H ₂ SO ₄ , 100%: 18 h/23°C	%	1/1
	HNO ₃ , 100%: 18 h/23°C	%	0/5
	NaOH, 33%: 72 h/110°C	%	1/5
Density	--	g/cm ³	1.7
Average Surface Resistance	pO	Ω	9×10E12
Average Specific Volume Resistance	pD	Ω cm	2.6×10E12
Average Dielectric Strength	Ed	kV/mm	16.7
Average Power Factor	50 Hz	tan δ	0.085
Average Dielectric Coefficient	50 Hz	εr	2.8
Thermal Conductivity	λ	W/mK	0.18

Certificates

BAM Tested
KTW-Guideline

DIN-DVGW
DNV GL approval

DIN-DVGW W 270
TA-Luft (Clean air)

FDA Conformity (components of KLINGER®top-chem 2002 comply with the FDA requirements
Regulation (EU) No. 1935/2004 (incl. 10/2011))