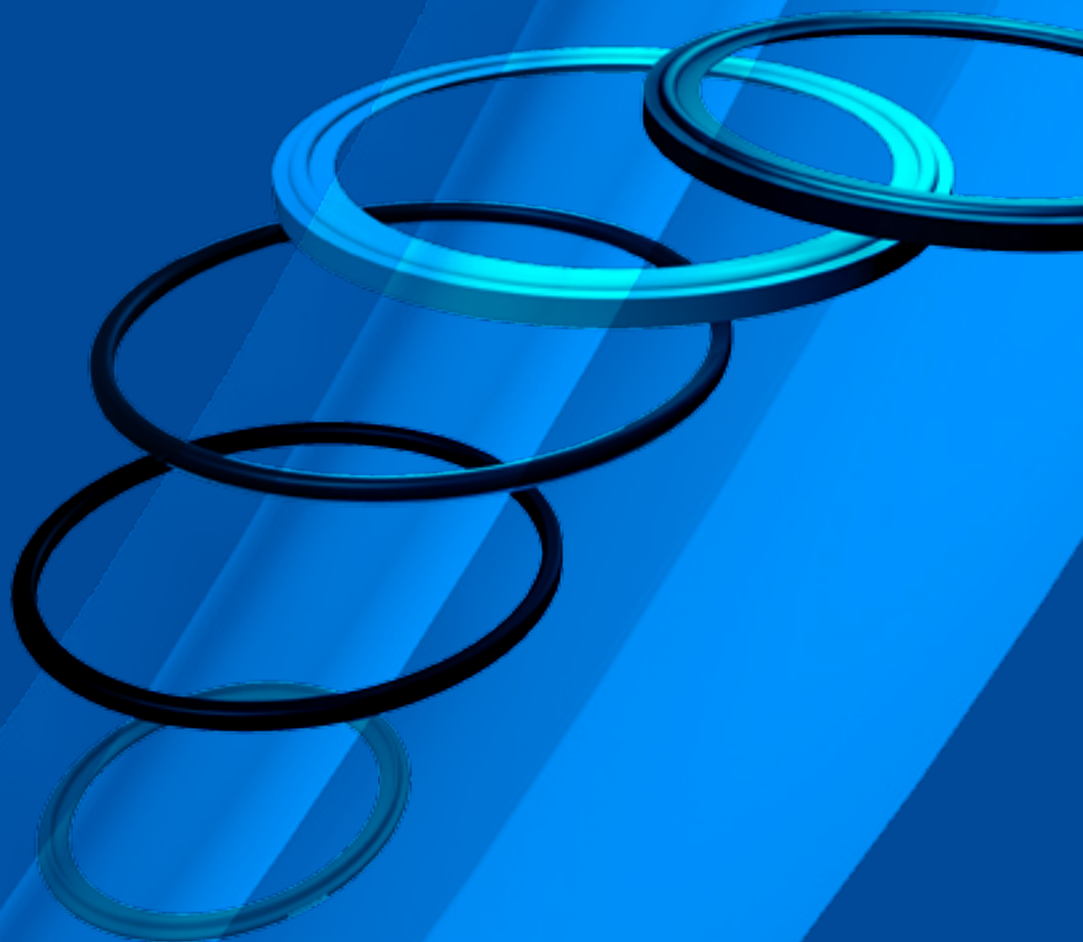


# COMPOUND SELECTION FOR **FLUIDS AND CHEMICALS**



## COMPOUND SELECTION FOR FLUIDS AND CHEMICALS

Material	Comment		Application	Temperature variations	Continuous steam	Unpolar solvents	Polar solvents	Acid + active	Acid	Alkaline	Elongation at break	Hardness	Density	Compression set			Temperature range / °C		Temperature range / °F	
														%	hours	T / °C/F	Min	Max	Min	Max
Tuf-Steel	Wide temperature variations. Extended service life (5x)	Composite of stainless steel 316L and PTFE	„Pharmaceutical applications most demanding S.I.P.“	++	++	++	++	++	++	++	270	68	3,45	5	24	175/347	-70	260	-94	500
Tuf-Flex®	Maintains seal with wide temperature variations. Has extended service life*	PTFE grafted onto an inner EPDM core	Pharmaceutical, biotechnology, ultra-pure water, WFI and difficult food and beverage processing	++	++	++	++	++	++	++	160	82	1,28	7	24	150/302	-70	180	-94	356
PTFE / FKM	Maintains seal with wide temperature variations. Has extended service life*	PTFE enveloped FKM	Food / Pharma application - more sealing flexibility through an inner core	+	++	++	++	++	++	++	150	45	1,90	15	24	175/347	-60	180	-76	356
PTFE / EPDM	Maintains seal with wide temperature variations. Has extended service life*	PTFE enveloped EPDM	Food / Pharma application - more sealing flexibility through an inner core	+	++	++	++	++	++	++	150	45	1,30	12	24	150/302	-60	140	-76	284
PTFE	Wide temperature variations and may cause leakage at ΔT	Perfluor-Rubber	To be used where low temperature variations occur	o	++	++	++	++	++	++	150	45	2,10	18,5	70	200/392	-15	230	5	446
SILICONE Platinum Cured	Very flexible low temperature	Silicone	Very flexible even at low temperatures	(+)	(+)	o	-	+	+	o	800	65-75	1,20	20	24	175/347	-60	200	-76	392
FKM Fluoroelastomer	Acceptable for steam applications	Fluor-Rubber	General use for process equipment, not recommended for SIP	+	++	++	o	+	+	+	200	80	1,85	13	24	175/347	-20	210	-4	410
EPDM Peroxide cured	Low pressure steam only	Ethylen-Propylen-Dien-Rubberz	General use for process equipment but service life needs to be considered, not recommended for fatty environment or unpolar solvents	+	++	-	+	+	+	+	400	70±5	1,25	10	24	150/302	-40	140	-40	284

++ excellent  
 + good  
 (+) satisfactory  
 o moderate  
 - not suitable

\* Dackweiler AG does not take liability for improper use  
 Table is subject of change without notification

