

			Material Sealing																		Material Housing																						
	Density (kg/m³)	Gaseous	-30°C 140°C EPDM	-30°C 140°C EPDM/EPDM	-30°C 120°C EPDM/PTFE	-15°C 200°C FFKM	-10°C 140°C FKM	-10°C 120°C FKM/FKM	-40°C 300°C Metal	-40°C 80°C Metal/HP	-20°C 400°C Metal/Wills®	-10°C 140°C NBR	-10°C 65°C NBR/NBR	-200°C 85°C PCTFE	-40°C 250°C PEEK/HT	-40°C 80°C Peek/PCTFE	-196°C 140°C PEEK/PCTFE-HP	PEEK/UMW/PE	-10°C 90°C POM	-196°C 230°C PTFE	-10°C 150°C PTFE/FKM	-10°C 80°C PTFE/NBR	-10°C 80°C PTFE/Peek	-40°C 230°C PTFE/Silikon	AlSi 304 - 1.4301	AlSi 316 - 1.4408	AlSi 316 Ti - 1.4571(03)	AlSi 316L - 1.4404	AlSi 316L - 1.4435	AlSi 318LN - 1.4462	AlSi S165M - 1.4418	aluminium AL anodised	-40°C 200°C CC-499K red brass	-196°C 300°C CW617N brass	-10°C 300°C EN-GJL250 grey cast	-20°C 300°C EN-GP240GH cast steel	-10°C 300°C EN-JS1025 ductile iron	-10°C 300°C P250GH+N - C22.8 PN160	PTFE Polytetrafluoroethylene	PVC J Polyvinyl chloride			
CNG - Compressed Natural Gas	0.7	ja							+			+		+			+			+					+		+	+		+					+								
CO carbon monoxide	1.25	ja					+					+					+			+	+				+		+		+				+	+	+	+							
CO2 carbon dioxide gas	1.98	ja					+			+		+					+			+	+	+			+		+	+		+			+	+	+	+							
Coke oven gas	0.6	ja					+																				+	+							+								
Condensate			+				+													+					+		+							+	+	+	+	+					
Condensate 200°C																				+	+						+	+					+	+	+	+	+						
Cool Emulsion, Cooling Water	1000		+				+	+				+					+			+	+				+	+	+						+	+	+	+							
Dimethylether DME	2	ja																		+						+	+	+															
Dipropylenglycolmethylether DPM																				+						+	+																
dirty Fluids							+						+								+					+	+							+	+								
Ethane C2H6	1.36	ja					+					+					+			+					+		+			+				+	+								
Ethanol	789		+		+												+			+					+	+	+							+	+	+	+						
Ethylacetat CH3 CO2 CH2 CH3	894																			+						+	+							+	+	+	+						
Ethylene C2H4	1.26	ja					+				+									+		+			+									+	+								
flour, powder, dust, soot			+				+					+																+			+												
Flue Gas SOX, SO2, N2, O2, CO		ja													+		+				+					+	+														+		
Formic Acid HCOOH 50% 20°C	1000																			+						+	+																
Forming Gas		ja					+				+									+		+				+									+	+	+						
Fuel Oil	920						+										+			+	+				+		+							+	+	+	+						
gaseous, liquid, aggressive		ja													+						+					+	+											+					
Gases flammable		ja					+				+						+			+					+		+			+				+	+	+	+						
Gasoline, Dieseloil, Fuels	800						+													+	+					+	+							+	+	+	+	+					
Glycerine aqueous, H2O with C3H8O3	1260						+														+				+																		
granules, sand, gravel, chalk			+				+				+																+			+													
Grinding oil with dirt and abrasion particles							+														+				+																		
HCL Hydrogen chloride gas	1.64	ja					+													+							+																

			Material Sealing																		Material Housing																	
Media	Density (kg/m³)	Gaseous	Material Sealing																		Material Housing																	
			-30°C 140°C	-30°C 140°C	-30°C 120°C	-15°C 200°C	-10°C 140°C	-10°C 120°C	-40°C 300°C	-40°C 80°C	-200°C 80°C	-40°C 250°C	-40°C 80°C	-196°C 140°C	PEEK/UMW/PE	-10°C 90°C	-196°C 230°C	-10°C 150°C	-10°C 80°C	-10°C 80°C	-40°C 230°C	AlSi 304 - 1.1331	AlSi 316 - 1.1408	AlSi 316 Ti - 1.4571(03)	AlSi 316L - 1.1404	AlSi 316L - 1.4435	AlSi 316LN - 1.4462	AlSi 316SM - 1.4418	aluminium AL enodised	CC-499K red brass	CU60/7N brass	EN-GJL250 grey cast	EN-GP240GH cast steel	EN-JS1025 ductile iron	P250GH+N - C22.8 PN160	PTFE Polytetrafluoroethylene	PVC I Polyvinyl chloride	
Helium Gas He	0.18	ja					+			+					+			+				+	+	+	+		+					+						
heptane (hexan, petrol)	684						+				+							+				+	+	+							+							
high viscous Fluids up to 1000 mm³/s							+										+					+		+						+								
Hot Air 180°C	1.2	ja																+	+				+	+					+	+	+	+	+					
hot Gases 230°C	1	ja										+											+	+							+		+					
Hydraulic Oil	800						+				+				+			+		+		+		+					+	+	+	+						
Hydrogen H2	0.09	ja					+			+				+	+			+	+			+	+	+	+			+			+		+		+			
Hydrogen Peroxide 0,5% H2O2, +20°C	1000						+										+						+	+														
Hydrogen Sulfide, gas, dry, H2S	1.6	ja	+				+										+					+	+	+												+		
Isobutane C4H10	2.51	ja					+											+					+	+							+							
isoprene C5H8	681																	+					+	+	+													
Isopropanol CH3 CH(OH)CH3	786						+											+					+	+	+				+	+								
JP-8 jet fuel aviation, kerosine	800						+								+			+	+				+	+	+						+		+					
Liquid Nitrogen -196°C LN2												+						+					+		+	+						+						
Liquid Carbon Dioxide LCO2							+											+	+				+		+	+					+							
LNG liquified natural gas -162°C	1590												+					+							+	+					+							
LPG liquified petrol gas propane, butane	600						+											+	+				+	+	+					+	+		+	+				
Lubricant, gear oil CLP460	900						+												+												+							
Mercaptane		ja				+								+			+					+	+	+			+											
Methane CH4	0.72	ja					+				+						+		+				+	+	+		+		+	+	+	+	+					
Methanol Alcohole CH3OH	793		+		+								+				+						+	+	+													
Mineral Oil	800						+				+						+						+	+	+				+	+	+	+						
Motor Oil	800						+				+						+	+					+	+	+					+	+	+	+					
natural Gas CH4	0.7	ja					+			+				+			+	+	+				+	+	+	+		+		+	+	+	+	+	+			
neogas NE	0.84	ja					+				+																				+							
Nitric acid aqueous 40%, HNO3	1100						+											+	+					+	+										+			

			Material Sealing																Material Housing																					
Media	Density (kg/m³)	Gaseous	EPDM -30°C 140°C	EPDM/EPDM -30°C 140°C	EPDM/PTFE -30°C 120°C	FKM -15°C 200°C	FKM -10°C 140°C	FKM/FKM -10°C 120°C	Metal 40°C 300°C	Metal/HP 40°C 80°C	Metal/Wills® 20°C 400°C	NBR -10°C 80°C	NBR/NBR -10°C 80°C	PCTFE -200°C 80°C	PEEKHT 40°C 250°C	Peek/PCTFE 40°C 80°C	PEEK/PCTFE-HP -106°C 140°C	PEEK/UHMWPE	POM -10°C 90°C	PTFE -106°C 230°C	PTFE/FKM 10°C 150°C	PTFE/NBR 10°C 80°C	PTFE/Peek 10°C 80°C	PTFE/Silikon 40°C 230°C	AISI 304 - -196°C 250°C	AISI 316 - -196°C 300°C	AISI 316 Ti - -196°C 300°C	AISI 316L - -196°C 80°C	AISI 316L - 1.4435 40°C 250°C	AISI 318LN - 1.4462 40°C 250°C	AISI S165M - 1.4418 40°C 80°C	aluminium AL anodised	CC109K red brass 40°C 200°C	CW617N brass -96°C 300°C	EN-GJL250 grey cast 10°C 300°C	EN-GP240GH cast steel 20°C 200°C	EN-JS1025 ductile iron -10°C 300°C	P250GH+N - C22.8 PN160 -10°C 300°C	PTFE Polytetrafluoroethylene	PVC I Polyvinyl chloride
Nitrogen dioxide NO2	2.053																			+					+	+	+													
Nitrogen Gas N2	1.25	ja	+				+			+		+					+		+	+	+	+			+		+	+	+		+		+	+	+					
Nitrogen oxides, nitrous gases NOx		ja															+			+					+	+	+													
Nitrous Oxide N2O	2	ja					+			+							+			+	+				+		+	+		+			+			+				
Odorant		ja				+											+			+					+		+	+		+										
Oxygen Liquid, -183°C LOX	1140																			+								+	+				+							
Oxygen O2	1.43	ja					+										+			+	+				+	+	+			+			+		+	+	+	+		
paint, ink - highly viscous			+				+					+									+							+			+									
Phenol, Carboic Acid - diluted with water						+														+						+	+	+												
Propane/Butane gaseous C3H8	2	ja					+					+					+			+	+				+	+	+			+			+	+	+	+	+			
Propionic acid C3H6O2	990						+													+	+				+	+	+													
propylene glycol C3H8O2							+					+								+													+	+	+					
Propylene, Propene - C3H6	1.915	ja					+													+					+	+	+							+	+					
Rape Oil							+													+								+					+	+	+	+				
refrigerant R290, R600a																				+					+	+	+						+	+						
Refrigerant R407C	2.51	ja																		+					+	+	+						+	+						
Resins							+													+	+				+	+	+													
sea water	1000																																							
sewage gas, proportionally H2S, NH3	0.77	ja	+																								+													
silan gas	1.34	ja					+													+	+				+	+	+													
slurry of chalk							+																		+									+						
Sodium hydroxide (sodium hydroxide), NaOH, 30%, +20°C			+																	+						+	+													
sodium hypochlorite NaOCl (Chlorine bleach) max. 12%, +20°C																				+							+													
Sodium nitrite - aqueous NaNO2	1290						+				+									+					+	+	+													
Sodium Phosphate NA3PO4							+										+			+	+				+	+	+			+										

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Media	Density (kg/m³)	Gaseous	EPDM -30°C 140°C	EPDM/EPDM -30°C 140°C	EPDM/PTFE -30°C 120°C	FFKM -15°C 200°C	FKM -10°C 140°C	FKM/FFKM -10°C 120°C	Metal -40°C 300°C	Metal/HP -40°C 80°C	Metal/Willis® -20°C 400°C	NBR -10°C 80°C	NBR/NBR -10°C 80°C	PCTFE -200°C 80°C	PEEK/HT -40°C 250°C	Peek/PCTFE -40°C 80°C	PEEK/PCTFE-HP -196°C 140°C	PEEK/UHMW/PE	POM -10°C 90°C	PTFE -196°C 230°C	PTFE/FFKM -10°C 150°C	PTFE/NBR -10°C 80°C	PTFE/Peek -10°C 80°C	PTFE/Silikon -40°C 250°C	AlSi 304 - 1.4301 -196°C 250°C	AlSi 316 - 1.4408 -196°C 300°C	AlSi 316 Ti - 1.4571 (81) -196°C 300°C	AlSi 316L - 1.4404 -196°C 80°C	AlSi 316L - 1.4435 -40°C 250°C	AlSi 318LN - 1.4462 -40°C 250°C	AlSi 5165M - 1.4418 -40°C 80°C	aluminium AL anodised	CC-609K red brass -40°C 200°C	CW617N brass -196°C 300°C	EN-GJL250 grey cast -10°C 300°C	EN-GP240GH cast steel -20°C 300°C	EN-1S1025 ductile iron -10°C 300°C	P250GH+N - C22.8 PN160 -10°C 300°C	PTFE Polytetrafluoroethylene	PVC I Polyvinyl chloride				
sodium silicate (waterglass)	1000						+					+									+	+			+	+	+																	
Sole (cooling sole) up to 40%			+									+																							+									
Steam 110°C	0.6		+																		+	+				+	+	+							+	+	+	+	+					
Steam 180°C	0.6	ja																			+	+					+	+							+	+	+	+	+					
Steam 200°C																					+	+					+	+							+	+		+						
Steam 230°C															+												+	+								+		+						
Steam 250°C									+		+				+												+	+							+		+							
Steam 300°C									+		+																+	+										+						
Sulfur Dioxide Gaseous, dry SO2	2.93	ja																			+							+																
Sulfur Dioxide Gaseous, wet, SO2	2.93	ja																			+							+																
Sulfur Dioxide Liquid SO2																					+					+	+	+																
Sulfuric acid H2SO4 max. 10%, 20°C	1.6	ja					+																					+																
Tetraflourmethane CF4, gas	1.69	ja																			+					+		+																
Thermal-Oil >180°C	1000																				+	+					+	+							+	+	+	+	+					
Thermal-Oil >200°C	1000																				+								+						+		+							
Thermal-Oil >230°C	1000														+												+	+								+		+						
Thermal-Oil >250°C	1000							+		+					+												+	+								+		+						
Thermal-Oil >300°C	1000									+																	+										+							
Toluol C6H5CH3	867																				+					+		+								+								
Triglycole, Triethylenglycole C6H14O4	1100						+														+						+	+																
Urea	1300						+														+						+	+																
Vacuum	1.2	ja	+	+			+	+				+	+														+	+							+	+	+	+						
Vacuum + Pressure		ja	+	+				+				+	+								+						+	+							+	+	+	+						
vapour aggressive (natural gas + steam)	0.9	ja				+															+						+	+																
Water demineralised, Osmose	1000		+				+														+	+				+	+	+								+								

Media	Density (kg/m³)	Gaseous	Material Sealing																Material Housing																						
			-30°C 140°C EPDM	-30°C 140°C EPDM/EPDM	-30°C 120°C EPDM/PTFE	-15°C 200°C FFKM	-10°C 140°C FKM	-10°C 120°C FKM/FKM	-40°C 300°C Metal	-40°C 80°C Metal/HP	-20°C 400°C Metal/Wills®	-10°C 80°C NBR	-10°C 80°C NBR/NBR	-200°C 80°C PCTFE	-40°C 250°C PEEK/HT	-40°C 80°C Peek/PCTFE	-196°C 140°C PEEK/PCTFE-HP	PEEK/UMW/PE	-10°C 90°C POM	-196°C 230°C PTFE	-10°C 150°C PTFE/FKM	-10°C 80°C PTFE/NBR	-10°C 80°C PTFE/Peek	-40°C 250°C PTFE/Silikon	-196°C 250°C AlSi 304 - 1.4301	-196°C 300°C AlSi 316 - 1.4408	-196°C 300°C AlSi 316 Ti - 1.4571 (81)	-196°C 80°C AlSi 316L - 1.4404	-40°C 250°C AlSi 316L - 1.4435	-40°C 250°C AlSi 318LN - 1.4462	-40°C 80°C AlSi 5165M - 1.4418	aluminium AL anodised	-40°C 200°C CC499K red brass	-196°C 300°C CW617N brass	-10°C 300°C EN-GJL250 grey cast	-20°C 300°C EN-GP240GH cast steel	-10°C 300°C EN-1S1025 ductile iron	-10°C 300°C P250GH4+N - C22.8 PN160	PTFE Polytetrafluoroethylene	PVC Polyvinyl chloride	
Water H2O with Glycole	1000		+				+	+			+					+				+	+				+	+	+							+	+	+	+				
Water, H2O	1000		+		+		+	+			+	+				+				+	+	+	+			+	+	+						+	+	+	+	+	+		
Water, Hot above 90°C H2O	1000		+				+	+												+	+				+		+							+	+	+	+	+			