

GAS PERMEABILITY OF FLOUROPOLYMERS

Data based on 100 um film thickness at 23° C. Method ASTM D1434 for gases.

Water vapor according to DIN 53122 PVDF film is made by Westlake Plastics from Kynar® PVDF

	T E F Z E L	A C L A R	H A L A R	K Y N A R	T E D L A R	3 m D Y N E O N			
	PTFE	PFA	FEP	ETFE	CTFE	ECTFE	PVDF	PVF	THV
Water vapor g / m ² d bar	5	8	1	2	1	2	2	7	173
Air cm ³ /cm ² .d. bar	2000	1150	600	175	-	40	7	50	291
Oxygen cm ³ /m ² .d. bar	1500	-	2900	350	60	100	20	12	696
Nitrogen cm ³ /m ² .d. bar	500	-	1200	120	10	40	30	1	217
Helium cm ³ /m ² .d. bar	3500	17000	18000	3700	-	3500	600	300	1200
Carbon Dioxide cm ³ /m ² .d. bar	15000	7000	4700	1300	150	400	100	60	2060

* Data published in 1980 Kunstsoffe paper entitled Fluorocarbon Films – Present situation and future outlook.