

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.

				TEFZEL	ACLAR	HALAR	KYNAR	TEDLAR	3m DYNEON**
	PTFE	PFA	FEP	ETFE	CTFE	ECTFE	PVDF	PVF	THV
Water vapor g / m ² .d. bar	5	8	1	2	1	2	2	7	1.73
Air cm ³ / m 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 Kunststoffe paper entitled Fluorocarbon Films – Present situation and future outlook.

**Data added 2002 by Plastic Film Enterprises