

GENERAL ENGINEERING PERMABILITY COEFFICIENT

PERMABILITY COEFFICIENT

$$\text{Permeability Coefficient} = \frac{V}{A \times T \times p}$$

Where:

V - volume of gas, in cm³, which diffuses through a 1mm thickness.

A - area across which the gas diffuses, in m².

T - diffusion time, in days.

p - pressure difference across the plastic, in bar.

PERMABILITY COEFFICIENT PER DIN 53380

Material	Gas				
	N ²	O ²	CO ²	H ²	He
PTFE	50	150	1500	-	3500
PVDF	3	2	10	-	60
PA-6 XE 3289	1	4	10	100*	60*
PA-6 A 28 NZ	0.5	2	5	50*	30*
PA-12 L 2124	-	30	180	210	160
PA-12 P40 TL	-	-	105	-	-
PA-12 L 25W40	8	35	150	1000*	500*
PA-12 L 2140	-	12	71	-	130
PA-11 P 40 TL	-	-	55	130	-
PA-11 POLT	2	20	65	65	-
POM H 2320	5	10	130	35	40
POM 150 SA	2	4	20	-	-
PEE 4055	150	-	3000	-	1400
PEE 5556	120	-	1600	-	900
PEE 7246	-	-	-	-	300

* Calculated value. Diffusion constants based on normal room temperature. Actual behaviour may vary considerably because of variations in processing the plastic.