

Table 1 - The effect of a pinhole on water vapour transmission rate

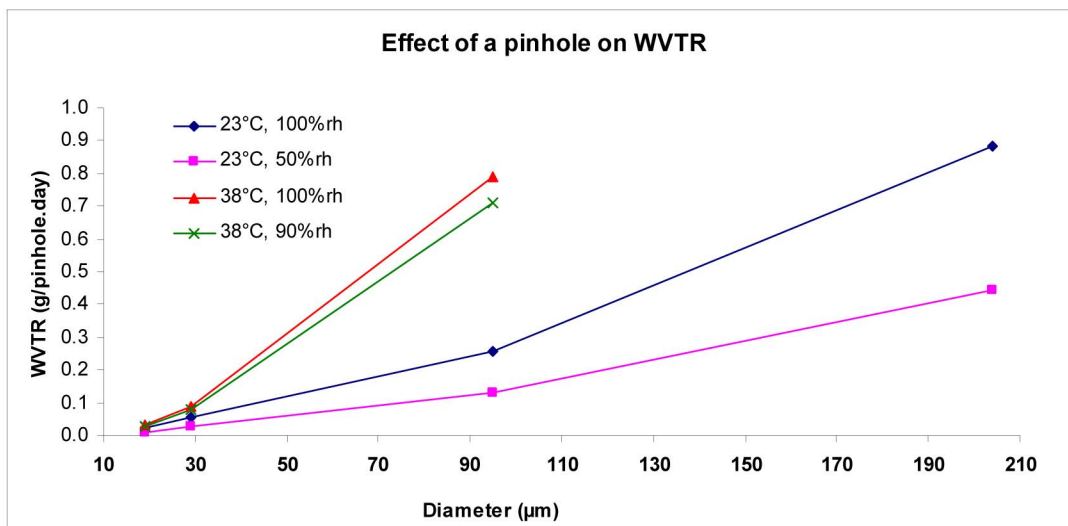


Table 2 - Some typical permeation rates for packaging films

| Film type | Thickness (micron) | OTR (cc/m ² .day) at 23°C | WVTR (g/m ² .day) at 38°C, 90% rh |
|-----------------------|--------------------|--------------------------------------|--|
| PET | 12 | 90 | 40 |
| Metallised PET | 12 | 0.5 | <1 |
| PVdC coated polyester | 15 | 6 | 14 |
| Plain cellulose | 22 | 8 - 130 dependant on moisture | 3500 |
| NC coated cellulose | 30 | 10 | 12 |
| PVdC coated cellulose | 28 | 8 | 5 |
| LDPE | 25 | 8,000 | 18 |
| HDPE | 25 | 3,000 | 9 |
| EVA | 25 | 10,000 | 70 |
| Cast PP | 25 | 4,200 | 12 |
| Cast nylon | 50 | 140 (dependant on moisture) | 35 |
| Cast nylon 66 | 30 | 80 (dependant on moisture) | 180 |
| Oriented nylon 6 | 15 | 45 (dependant on moisture) | 260 |
| EVOH | 20 | 0.2 - 1.8 (dependant on moisture) | 30 - 75 |
| Plasticised PVC | 20 | 2,000 (dependant on plasticiser) | 200+ |
| Rigid PVC | 20 | 260 | 60 |
| Extruded PVdC | 20 | 3 | 5 |
| Oriented PS | 25 | 2,500 | 170 |
| Aluminium foil | 9 | 0 (if pinhole free) | 0+ (dependant on pinholes - see Table 2 below) |