

Parafilm M[®] FILM Performance Characteristics

Permeability Characteristics:

- Oxygen (ASTM 1927-98):
 - 150 cc/m² d at 23°C and 50% RH
- Carbon Dioxide (Modulated IR Method):
 - 1200 cc/m² d at 23°C and 0% RH
- Water Vapor (ASTM F1249-01):
 - Flat:
 - 1 g/m² d at 38°C and 90% RH
 - Creased:
 - same as flat



Note: Because of low water permeability and the insensitivity of this material to moisture vapor, it is unlikely that differences in relative humidity (RH) will make a difference in the oxygen permeability.

Effects of Common Reagents:

- Hydrochloric acid conc. (12N) dil. (5N) - no apparent effect in 24 hours
- Sulphuric acid conc. (36N) dil. (5N) - no apparent effect in 24 hours
- Nitric acid conc. (16N) dil. (5N) - no apparent effect in 24 hours
- Sodium hydroxide conc. (22%) - no apparent effect in 24 hours



- Ammonium hydroxide conc. (28% NH₃) - no apparent effect in 24 hours
 - Potassium permanganate:
 - 5%: no apparent effect except permanent dark brown coloration in 18 hours
 - 0.1%: same as 5% but slightly less color
 - Iodine solution 0.1N: no effect except brown staining in 18 hours
 - Salt (NaCl) solution 20%: no apparent effect in 24 hours
 - Ethyl Alcohol 95%: no apparent effect except some face whitening in 24 hours
 - Isopropyl alcohol 99%: no apparent effect in 24 hours
 - Not recommended for use with chlorinated, non-polar aliphatic and aromatic solvents
- Film becomes soft and sticky at about 130°F to 150°F (68°C)