

# COMPARATIVE STUDY ON PERMEABILITY COEFFICIENTS OF FLEXIBLE TUBING

The following test data summarizes the results of Saint-Gobain Performance Plastics Corporation study on the permeability of select tubing products.

Tubing Material	Carbon Dioxide	Nitrogen	Oxygen
Fluran <sup>®</sup> F-5500-A	38	5	14
Tygothane <sup>®</sup> C-210-A	168	6	18
Tygon <sup>®</sup> S-50-HL	270	30	60
Tygon <sup>®</sup> 2275	745	45	135
Tygotprene <sup>®</sup> XL-60	1,116	62	186
Tygon <sup>®</sup> 2001	1,140	76	202
PharMed <sup>®</sup> BPT	1,200	80	200
Tygon <sup>®</sup> 2075	4,840	350	980
Tygon <sup>®</sup> 3350	35,250	3,200	6,610
Versilic <sup>™</sup> SPX-50	42,800	3,900	8,025

Permeability Coefficient ( $\times 10^{-11}$ ) cc • cm / cm<sup>2</sup> • s • cmHg

Permeability Coefficient = amount of gas (cm<sup>3</sup>) x tubing wall thickness (cm) ÷ surface area of tubing ID (cm<sup>2</sup>) x time (seconds) x pressure drop across tubing wall (cmHg)

**IMPORTANT:** Saint-Gobain Performance Plastics Corporation does not assume any responsibility or liability for any advice furnished by it, for the performance or results of any installation or use of the product or of any final product into which the product may be incorporated by the purchaser and/or user.

It is the user's responsibility to ensure the suitability and safety of Saint-Gobain tubing for all intended uses. Laboratory, field or clinical tests must be conducted in accordance with applicable requirements in order to determine the safety and effectiveness for use of tubing in any particular application.



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