

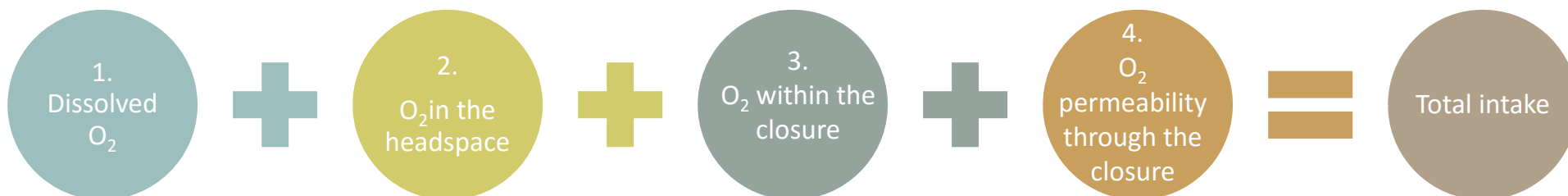
CLOSURES PROPERTIES THAT IMPACT THE SENSORY QUALITY OF BOTTLED WINE



2

Oxygen that impact wine quality after bottling

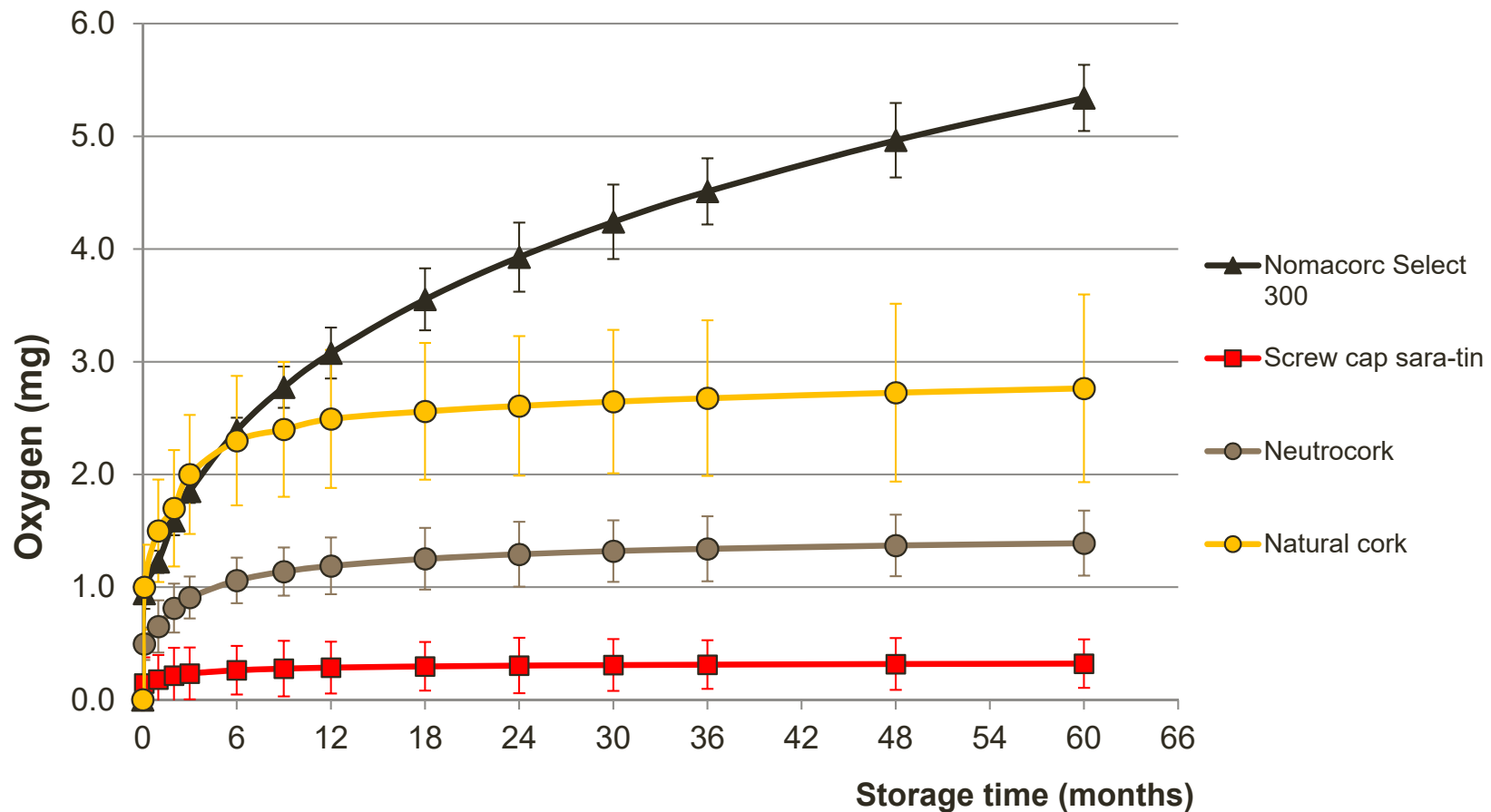
TOTAL OXYGEN INTAKE



Wine exposition to oxygen before and during bottling are very important, their effect (cumulative) can be only observed during post-bottling

Bottled wine oxygenation related with closures

OXYGEN TRANSMISSION KINETICS

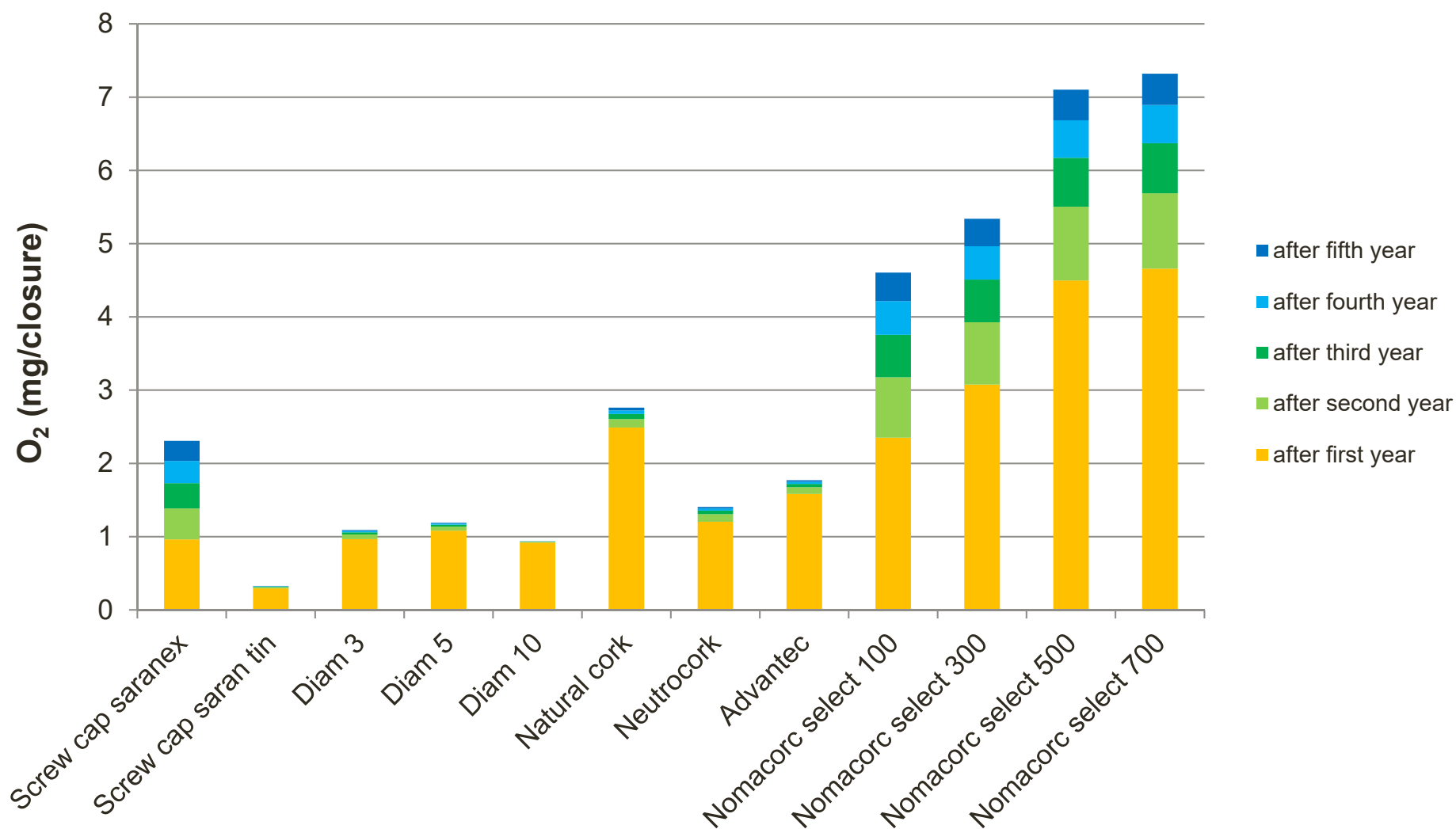


Oxygen ingresses through closures regardless the storage position

Lopes, P.; Saucier, C.; Glories, Y. Nondestructive colorimetric method to determine the oxygen diffusion rate through closures used in winemaking. *J. Agric. Food Chem.* 2005, 53, 6967-6973.

Bottled wine oxygenation related with closures

OXYGEN TRANSMISSION PER YEAR



Bottled wine oxygenation related with closures

MAIN ROUTES BY WHICH O₂ ENTERS INTO BOTTLES



DIFFUSION

Oxygen transfer occurs through the gas phase in the lenticels plasmodesmata or inside cells by Fick or Knudsen mechanisms