Coefficient	Value	Reference
D_{W_O}	$3.01 \cdot 10^{-9}$ m^2 s^{-1}	(1)
D_{W_N}	$1.62 \cdot 10^{-9}$ m^2 s^{-1}	(1)
D_{W_A}	$1.74 \cdot 10^{-9}$ m^2 s^{-1}	(1)
D_{W_C}	$1.24 \cdot 10^{-9}$ m^2 s^{-1}	(2)
f_{VS}	0.2-0.8	Different scenarios tested
fX_H	76.8% and 54.8%	Calculated ($1-fX_A-fX_N-fX_{anammox}$)
fX_A	7.4% and 22.6%	For Z400 and Z50
fX_N	12.9% and 22.6%	For Z400 and Z50
$S_{O,bulk}$	5.5 and 5.6 g m^{-3}	For Z400 and Z50 in batch tests
$S_{N,bulk}$	0.5 and 0.8 g m^{-3}	For Z400 and Z50 in batch tests
$S_{A,bulk}$	30.7 and 31.3 g m^{-3}	For Z400 and Z50 in batch tests
$S_{C,bulk}$	10 g m^{-3}	Assumed
L	379 and 45 μm	For Z400 and Z50 (based on FISH)
δ_{BL}	$(1.6\text{-}16.3) \cdot 10^{-6}$ m	Fitted values

References

1. Williamson K, McCarty PL. 1976. Verification Studies of the Biofilm Model for Bacterial Substrate Utilization. Journal (Water Pollution Control Federation) 48:281-296.
2. Perry R, Perry J. 1963. Chemical Engineers' Handbook, 4 ed. McGraw-Hill, New York.