

APÉNDICE 8: CAPACIDAD DE BIOSORCIÓN (q)

A. Plomo

Pb 20 ppm		
S/txt	(20 ppm - 18.786 ppm) 0.075 ml / 4 g	0.023 mg/g
HNO3	(20 ppm - 15.460 ppm) 0.075 ml / 4 g	0.085 mg/g
NaOH	(20 ppm - 18.813 ppm) 0.075 ml / 4 g	0.022 mg/g
Pb 25 ppm		
S/txt	(25 ppm - 23.440 ppm) 0.075 ml / 4 g	0.029 mg/g
HNO3	(25 ppm - 23.989 ppm) 0.075 ml / 4 g	0.019 mg/g
NaOH	(25 ppm - 24.046 ppm) 0.075 ml / 4 g	0.018 mg/g
Pb 30 ppm		
S/txt	(30 ppm - 27.929 ppm) 0.075 ml / 4 g	0.039 mg/g
HNO3	(30 ppm - 28.494 ppm) 0.075 ml / 4 g	0.028 mg/g
NaOH	(30 ppm - 29.019 ppm) 0.075 ml / 4 g	0.018 mg/g
Pb 100 ppm		
S/txt	(100 ppm - 79.892 ppm) 0.075 ml / 4 g	0.377 mg/g
HNO3	(100 ppm - 77.113 ppm) 0.075 ml / 4 g	0.429 mg/g
NaOH	(100 ppm - 92.203 ppm) 0.075 ml / 4 g	0.146 mg/g
Pb 150 ppm		
S/txt	(150 ppm - 69.8955 ppm) 0.075 ml / 4 g	1.502 mg/g
HNO3	(150 ppm - 56.3955 ppm) 0.075 ml / 4 g	1.755 mg/g
NaOH	(150 ppm - 84.087 ppm) 0.075 ml / 4 g	1.236 mg/g
Pb 200 ppm		
S/txt	(200 ppm - 58.262 ppm) 0.075 ml / 4 g	2.658 mg/g
HNO3	(200 ppm - 47.944 ppm) 0.075 ml / 4 g	2.851 mg/g
NaOH	(200 ppm - 63.928 ppm) 0.075 ml / 4 g	3.206 mg/g
Pb 250 ppm		
S/txt	(250 ppm - 26.436 ppm) 0.075 ml / 4 g	4.192 mg/g
HNO3	(250 ppm - 27.592 ppm) 0.075 ml / 4 g	4.170 mg/g
NaOH	(250 ppm - 31.854 ppm) 0.075 ml / 4 g	4.090 mg/g

Tabla 44. Cálculo de la capacidad de biosorción de plomo por *S. cerevisiae* cepa CM-05 respecto a las distintas condiciones de tratamiento y concentración de soluciones.

B. Cadmio

Cd 20 ppm		
S/txt	(20 ppm - 17.050 ppm) 0.075 ml / 4 g	0.055 mg/g
HNO3	(20 ppm - 17.043 ppm) 0.075 ml / 4 g	0.055 mg/g
NaOH	(20 ppm - 17.531 ppm) 0.075 ml / 4 g	0.046 mg/g
Cd 25 ppm		
S/txt	(25 ppm - 21.963 ppm) 0.075 ml / 4 g	0.057 mg/g
HNO3	(25 ppm - 22.731 ppm) 0.075 ml / 4 g	0.043 mg/g
NaOH	(25 ppm - 22.785 ppm) 0.075 ml / 4 g	0.042 mg/g
Cd 30 ppm		
S/txt	(30 ppm - 28.248 ppm) 0.075 ml / 4 g	0.033 mg/g
HNO3	(30 ppm - 29.144 ppm) 0.075 ml / 4 g	0.016 mg/g
NaOH	(30 ppm - 29.492 ppm) 0.075 ml / 4 g	0.010 mg/g
Cd 100 ppm		
S/txt	(100 ppm - 75.493 ppm) 0.075 ml / 4 g	0.460 mg/g
HNO3	(100 ppm - 79.740 ppm) 0.075 ml / 4 g	0.380 mg/g
NaOH	(100 ppm - 81.677 ppm) 0.075 ml / 4 g	0.344 mg/g
Cd 150 ppm		
S/txt	(150 ppm - 60.458 ppm) 0.075 ml / 4 g	1.679 mg/g
HNO3	(150 ppm - 73.406 ppm) 0.075 ml / 4 g	1.436 mg/g
NaOH	(150 ppm - 75.077 ppm) 0.075 ml / 4 g	1.405 mg/g
Cd 200 ppm		
S/txt	(200 ppm - 42.954 ppm) .075 ml / 4 g	2.945 mg/g
HNO3	(200 ppm - 59.630 ppm) .075 ml / 4 g	2.632 mg/g
NaOH	(200 ppm - 64.220 ppm) .075 ml / 4 g	2.546 mg/g
Cd 250 ppm		
S/txt	(250 ppm - 26.350 ppm) 0.075 ml / 4 g	4.193 mg/g
HNO3	(250 ppm - 37.253ppm) 0.075 ml / 4 g	3.989 mg/g
NaOH	(250 ppm - 38.355 ppm) 0.075 ml / 4 g	3.968 mg/g

Tabla 45. Cálculo de la capacidad de biosorción de cadmio por *S. cerevisiae* cepa CM-05 respecto a las distintas condiciones de tratamiento y concentración de soluciones.