

Table 2. Beryllium Reservoir Abundances and Fluxes

Reservoir	Be, kg	Be, kg/yr	Be concentration
Mantle ¹	2×10^{17}		
MORB source			0.02-0.03 ppm*
Intraplate source			0.08-0.1 ppm*
“Primitive mantle”			~ 0.066 ppm*
Oceans ¹	2.5×10^{11}		0.2 pg/g (seawater)
River inputs ²		4×10^4	1.2 pg/g (river water)
Aerosol inputs ³		$7-24 \times 10^4$ (?)	
Marine hydrothermal inputs ⁴		$1-5 \times 10^4$	0.1-0.4 ng/g (endmember vent fluids)
Marine Sediments ⁵	6×10^{14}		1.5 ppm
Continents ¹	3×10^{16}		1.5 ppm
Additions to ocean crust via MORB magmatism ⁵		9.9×10^6	0.3 ppm (MORB)
Sediment Subduction ⁵		1.5×10^6	1.5 ppm (sediments)
Additions to the continents via arc magmatism ⁵		1.6×10^6	0.5 ppm (Arc basalts)

*Inverse modeling results for MORB suites (Ryan and Langmuir 1988) and inferences from Be/Nd ratios.

1. Mass data from Press and Siever (1978)
2. From Measures and Edmond (1983)
3. From Brown et al. (1992)
4. From Von Damm et al. (1985a)
5. Mass data from Reymer and Schubert (1984)