

PREPARATION OF A BRAZILIAN MUSSEL REFERENCE MATERIAL

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Certified reference materials are important tools in the quality assurance of analytical results as they may be used in method validation, calibration of instruments and in the realization of the traceability of analytical results to stated references. For a particular use, the most suitable reference materials are those whose matrix and certified values resemble those of the samples of interest and hence, the availability of diverse matrix reference materials is highly desirable. This study describes the preparation of a mussel reference material using the *Perna perna* species. This mussel species is abundant in most of the Brazilian seashore and is currently being used in biomonitoring studies in our laboratory. It also has economical importance due to its growing cultivation in aquaculture farms for human consumption. The various aspects of the preparation such as sampling, processing, physical and chemical characterization following internationally agreed recommendations are presented. Preliminary results for the concentration of elements such as As, Br, Co, Cr, Fe, K, Na, Se and Zn determined by instrumental neutron activation analysis and Cd, Hg and Pb determined by atomic absorption spectrometry, are also presented.