

Mushroom powder - Trace elements (control sample)

Art. ID	IC-CS-M-3
Unit	20 g
Deliverydetails	No Dangerous Good /not restricted

Description

Description of material:
Wild mushrooms (*Boletus edulis*) were collected in the forest in north-west Poland, cleaned, i.e. dust, soil and attached mosses were removed. The end part of stalks was cut off using stainless steel knife. Mushrooms were cut to smaller parts, which were then air dried at a temperature 25 ? 60oC according to standard procedure used by food concentrate producers. Dried mushrooms (caps and stalks) were milled in a centrifugal mill made of stainless steel and sieved by stainless sieves. The fraction of particles with diameter ? 0.3 mm was collected.
 The obtained material was further homogenized by mixing in a plastic drum rotated in three directions, distributed into PET bottles in portion of ca. 20 g and firmly covered. Care was taken to avoid contamination. The material was then sterilized by electron beam radiation from linear accelerator with dose of 28 kGy. Homogeneity was examined for the sample size of 250 mg for each of element certified i.e. As, Cr, Cd, Cu, Hg, Pb, Se and Zn. Statistical evaluation has been performed following ISO 13528:2005 standard [1] recommendations confirming good homogeneity of the material for sample masses ? 250 mg.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
dry mass	Arsenic (As)	[7440-38-2]	0,651	mg/kg		
dry mass	Cadmium (Cd)	[7440-43-9]	1,229	mg/kg		
dry mass	Chromium (Cr)	[7440-47-3]	5,79	mg/kg		
dry mass	Copper (Cu)	[7440-50-8]	18,73	mg/kg		
dry mass	Mercury (Hg)	[7439-97-6]	2,849	mg/kg		
dry mass	Lead (Pb)	[7439-92-1]	1,863	mg/kg		
dry mass	Selenium (Se)	[7782-49-2]	17,43	mg/kg		
dry mass	Zinc (Zn)	[7440-66-6]	113,30	mg/kg		