

Report No.: 16097
Date: 25.02.2013
Contact: GB

Task:

Application field: Biology
Material: **Bones**
Feed size: 75 mm
Feed quantity: 50 g (BB 50), 2 x 10 g in MM 400
Material specification(s): dry
Customer requirements(s): 200 µm
Subsequent analysis: DNA analysis, radiocarbon dating (C14)

Solution

Selected Instrument(s): Jaw Crusher BB 50
Mixer Mill MM 400
Configuration(s) Item nos.: 1 x Jaw Crusher BB 50 200-240 V, 50/60 Hz breaking jaws of manganese steel wearing sheets of stainless steel
1 x MM 400, 100-240 V, 50/60 Hz
2 x Grinding jar, zirconium oxide, 35 ml, screw top design
2 x Grinding ball, zirconium oxide, 20 mm ø
Please note: Other electrical versions of the instrument(s) are available with different item numbers.

Parameter(s): BB 50: Gap width 2 mm
MM 400: Frequency 25 Hz

Time: BB 50: < 1 min
MM 400: 3 min

Achieved result(s): BB 50: < 3 mm
MM 400: predominantly < 200 µm

Remark(s): BB 50: The whole sample is ground to < 3 mm.
MM 400: For fine grinding a representative part sample of 10 g and 1 grinding ball are filled into each grinding jar. To avoid discoloration zirconia grinding tools have been used for fine grinding.

Recommendation: The Jaw Crusher BB 50 and Mixer Mill MM 400 are suitable to grind the sample material under the above mentioned conditions.

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Pictures of the sample:



Picture 1: Original sample



Picture 2: Sample after primary size reduction in BB 50



Picture 3: Sample after comminution in MM 400

The application report is based solely on the processing of the available sample material in the indicated amount. No legal claims shall be derived from this test report.

Subject to technical modification and errors.

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