Task:

Application field: Agriculture

Material: Fertilizer: pellets and granulates

Feed size: 5-15 mm

Feed quantity: 130 g (per test)

Material specification(s): medium-hard

Customer requirement(s): < 500 µm; about 100 g/batch; avoidance of increased temperatures

Subsequent analysis: Determination of nitrogen and other elements

Solution:

Selected instrument(s): ZM 200 Ultra Centrifugal Mill

Configuration(s): Push-fit rotor ZM 200 of stainless steel with 12 teeth; Distance sieve of stainless steel, Conidur holes 1.5 and 0.5 mm

Parameter(s): Revolution speed 18000 rpm

Time: 1 min. (about per each test)

Achieved result(s): Distance sieve 1.5 / 0.5 mm: 98.5 % < 500 µm

Remark(s): To avoid a relevant temperature increase of the powder sample and a sieve blocking due to its smeary, moisture containing character, it is only possible to process it with distance sieve.

Recommendation: For the fine grinding of fibrous, medium-hard fertilizers we recommend our Ultra-Centrifugal Mill ZM 200 according to the above mentioned conditions.

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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Pictures of the sample

Fig. 1: Initial pellet fertilizer

Fig. 2: Initial granulate-1 fertilizer

Fig. 3: Initial granulate-2 fertilizer

Fig. 4: Initial powder fertilizer

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