Task:

Application field: Food

Material: Frozen beans

Feed size: 2-50 mm

Feed quantity: 750 g

Material specification(s): hard, moist

Customer requirement(s): Homogeneous sample

Subsequent analysis: Vitamin Determinatin, Determination of toxines

Solution:

Selected instrument(s): Knife Mill Grindomix GM 300

Configuration(s): Cutting container of plastic incl. knife holder, autoclavable, 5 litres for GM 300; Knife stainless steel; Standard knife GM 300 made of stainless steel, autoclavable; Standard lid of plastic GM 300, autoclavable

Parameter(s): Revolution speed
Pre-grinding 3000 rpm, direction impact
Fine-grinding 3000 rpm, direction cut

Time: 30 s (10 sec pre- + 20 sec fine-grinding)

Achieved result(s): Homogeneous sample, temperature after grinding < 0 °C

Remark(s): Pre-grinding for 10 sec at 3000 rpm with direction impact. Afterwards fine-grinding for additional 20 sec at 3000 rpm with direction cut

Recommendation: The Knife Mill Grindomix 300 is suitable to homogenize the sample material under the above mentioned conditions.
Pictures of the sample

Fig. 1: Original sample beans in GM 300

Fig. 2: Beans after pre-grinding in GM 300

Fig. 3: Beans after fine-grinding in GM 300