## Task:

**Application field:** Food  
**Material:** Frozen vegetables (Cauliflower, broccoli, carrots)  
**Feed size:** 10-40 mm  
**Feed quantity:** 750 g (one bag)  
**Material specification(s):** medium-hard, moist  
**Customer requirement(s):** Homogeneous frozen sample  
**Subsequent analysis:** Vitamin Determination

## Solution:

**Selected instrument(s):** Knife Mill Grindomix GM 300  
**Configuration(s):** Cutting container of plastic incl. knife holder, autoclavable, 5 litres for GM 300; Standard knife GM 300 made of stainless steel, autoclavable; Standard lid of plastic GM 300, autoclavable  
**Parameter(s):** Revolution speed  
Pre-grinding 2000 rpm, direction impact  
Fine-grinding 2000 rpm, direction cut  
**Time:** 40 s (20 sec pre- + 20 sec fine-grinding)  
**Achieved result(s):** homogeneous sample, predominantly < 1 mm, temperature after grinding -4 °C  
**Remark(s):** An elongated grinding does not increase the fineness  
**Recommendation:** The Knife Mill Grindomix GM 300 is suitable to homogenize the sample material under the above mentioned conditions.
Pictures of the sample

Fig. 1: Original sample

Fig. 2: Sample in GM 300

Fig. 3: Sample after fine-grinding