

Report No.: 13517

Task:

Application field: Medicine / Pharmaceuticals

Material: Collagen

Feed size: 1 - 40 mm

Feed quantity: 1 q

Material Fibrous, temperature sensitive

specification(s):

Customer $< 50 \mu m, 1 g$

requirement(s):

Subsequent analysis:

Particle Size Analysis

Solution:

Selected CryoMill

instrument(s):

Configuration(s): Grinding jar 25 ml, zirconia for CryoMill, 1 grinding ball Ø

20 mm, zirconia

Parameter(s): Frequency 25 Hz

Time: Automatic pre-cooling

Grinding 7 cycles 4 min, intermediate cooling 45 s

Achieved 6 cycles of 4 min: $d90 = 52 \mu m$ **result(s):** 7 cycles of 4 min: $d90 = 23 \mu m$

Remark(s): After grinding slight sticking at jar wall and balls has to be

expected.

Recommendation: The CryoMill is suitable to grind the sample material under

the above mentioned conditions.



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Pictures of the sample



Fig. 1: Original sample



Fig. 2: Sample after grinding in the CryoMill