Task:

Application field: Chemistry / Plastics

Material: Plastic polymeric

Feed size: 0-20 mm (fragments)

Feed quantity: 100 g

Material specification(s): medium-hard, brittle

Customer requirement(s): approx. 250 µm

Subsequent analysis: Dilution Viscosity

Solution:

Selected instrument(s): ZM 200 Ultra Centrifugal Mill

Configuration(s): push-fit rotor with 12 teeth and stainless steel; ring sieve of stainless steel with trapezoid holes 0.5 mm

Parameter(s): Revolution speed 18000 min⁻¹

Time: 3 min. (per 110 g)

Achieved result(s): 95% < 250 µm

Remark(s): Due to the brittle breaking behaviour of the material the processing of grinding could be carried out without any pre-treatment like cooling.

Recommendation: For the preparation of medium-hard and brittle plastic polymer the Ultra-Centrifugal Mill ZM 200 is suitable under above mentioned conditions.