Task:

Application field: Glass / Ceramics

Material: Magnesium oxide (MgO)

Feed size: 0-100 µm

Feed quantity: 100 g (per sample + 50 ml isopropyl alcohol)

Material specification(s): medium-hard

Customer requirement(s): 0.5 µm; production of a stable suspension

Subsequent analysis: Not defined

Solution:

Selected instrument(s): PM 400 Planetary Ball Mill

Configuration(s): 2 x grinding jars, 250 ml zirconia grinding balls ø 3 mm, 150 ml (= 530 g) of zirconia

Parameter(s): Revolution speed: 350 rpm

Time: 4 h

Achieved result(s): $d_{50} = 0.74$ µm

Remark(s): The particle size distribution of MgO was measured by the HORIBA Laser LA-920

Recommendation: For colloidal grinding of medium-hard oxide ceramics the Planetary Ball Mill PM 400 is suitable under 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.

© Retsch GmbH - www.retsch.com - lab@retsch.com