**Task:**

**Application field:** Chemistry / Plastics

**Material:** Titanium dioxide (TiO₂)

**Feed size:** 0-50 µm

**Feed quantity:** 3 ml (+ 3 ml distilled water)

**Material specification(s):** medium-hard

**Customer requirement(s):** < 0.5 µm

**Subsequent analysis:** not defined

**Solution:**

**Selected instrument(s):** PM 100 Planetary Ball Mill

**Configuration(s):** Grinding jar 50 ml, type "C", zirconia (YTZ); 70 g (= 20 ml) grinding balls, ø 2 mm zirconia (YTZ)

**Parameter(s):** Revolution speed 500 rpm

**Time:** 30 min.

**Achieved result(s):**

d₅₀ = 1.1 µm  
d₉₀ = 2.7 µm  
"Particle analysis by HORIBA-Laser LA-920"

**Remark(s):** Extension of the grinding time will increase the final fineness.

**Recommendation:** For fine grinding of titanium dioxide the Planetary Ball Mill PM 100 is suitable under the above mentioned conditions.

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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.

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