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PRODUCT CATALOG / Grinding Jars

PTFE planetary mill jar

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A PTFE-contact milling jar for applications where chemical compatibility and the working surface are important selection factors.

Overview

A PTFE-contact milling jar for applications where chemical compatibility and the working surface are important selection factors. Use the material name PTFE when specifying the item rather than relying on a trade name alone.

How it works

The jar working surface forms part of the contact system between sample, media and mill. Material selection should balance the required mechanical action with chemical compatibility and the acceptable contribution from wear.

Chemical resistance is not a universal solvent, temperature or pressure approval. Check the sample, liquid, seals and complete jar construction together.

Key features

- The detailed chart identifies nominal volumes and internal/external dimensions.
- The product information describes a machined PTFE working component.
- Sample and media loading must be checked for the actual mill and jar construction.

Specifications

Published catalog references are reproduced below. Nominal volume is not a sample-mass rating. Confirm the selected model, material grade, electrical supply and complete supplied configuration

in the quotation.

Published dimensions and configurations — 1

Model / nominal volume	External diameter (mm)	Internal diameter (mm)	Height (mm)
25mL	63	31	65
50mL	63	43	59
100mL	68	48	76
250mL	88	68	98
500mL	108	88	115
1L	133	109	142
1.5L	133	109	178
2L	158	134	172
2.5L	158	134	202
3L	158	138	210
4L	178	158	226
5L	218	190	217
10L	246	218	307
15L	273	243	372
20L	320	285	359
25L	320	285	424

Applications

Compatible chemical, polymer and laboratory mixing or milling processes.

Suitability depends on the actual sample, process and analytical requirements; a listed application is not a guaranteed final-particle-size result.

Accessories and options

Specify dimensions, support construction, closure and seal requirements, including any proposed vacuum or atmosphere operation.

State the required grade, quantities, drawings and destination when requesting a quotation.

Confirm what is included, the document requirements, packing and commercial terms; no generic delivery time or universal custom capability is assumed.

[Compare milling jars](#) · [Compare grinding media](#) · [Low temperature planetary grinding machines](#) · [Ultrasonic planetary ball mills](#)

Selection guidance

Match polytetrafluoroethylene (PTFE) to the sample chemistry and the elements or residues that matter to the analysis. Then confirm the dimensions, complete loaded mass and operating arrangement against the selected mill.

[Work through the selection guide](#) · [Request a configuration quotation](#)

Trials and comparisons

Material/application reference

Membrane formulation

XQM-0.4A · Wet milling

- Sample: 60 g
- Jar: 100 mL PTFE jar
- Recorded sampling / duration: 15 h

Recorded observations

Recorded item	Value
Sample mass	60 g
Jar volume	100 mL
Recorded duration	15 h
Particle-size result	Not reported

The record documents a PTFE-jar procedure, not a particle-size or chemical-compatibility certification. The supplied jar grade, seal and part number are not identified.

Material/application reference

Polyethylene glycol

XQM with air-cooling equipment · Successive dry-milling observations

- Sample: 12 g

- Jar: 250 mL PTFE jar; agate media
- Recorded sampling / duration: Four successive 30 min stages

Recorded observations

Stage	Speed setting (as recorded)	Recorded jar temperature (°C)
1	100	20
2	200	19
3	300	20
4	500	25

The speed reference/unit and temperature sensor position are not fully documented. Speed and cumulative processing time both changed, so this is not a controlled speed-only experiment. No particle-size result was obtained. It illustrates why cooling-area and sample/jar temperatures must be distinguished.

How to plan a fair comparison

For a polytetrafluoroethylene (PTFE) comparison, use matched sample portions and the same measurement/dispersion method. State the jar, media, mass/volume loading basis, processing schedule and contamination measurements. A change in material grade alone is not established as the cause of a result.

These anonymous records are not operating instructions. Measurement and dispersion methods are not fully specified in the test summaries; results apply to the reported samples and conditions.

Discuss a matched sample evaluation

Plan your milling configuration.

TENCAN develops and manufactures planetary milling equipment, with application support in Changsha and a production base in Wushi, Hunan.

Share your material, batch size, target particle size and contamination limits. Our team can help confirm the mill, jars, media and electrical requirements, or arrange a sample grinding evaluation.

Reference information applies to the described models and conditions. Confirm the final specification and supplied accessories with TENCAN before ordering.

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Product page <https://www.planetaryballmill.com/milling-accessories/jars/ptfe-planetary-mill-jar.html>

Sample grinding www.planetaryballmill.com/sample-testing/