

What does the specification 9-425mm for screw top autosampler vials mean - FAQ

The first number refers to the "Major Diameter" of the screw thread, (Major Diameter is the OD / outside diameter of the screw top vial (not the OD of the vial) at the thread line, measuring on the outside of the threads, minor diameter is the smaller diameter, measuring OD between the threads). We use major diameter to describe our screw caps and vials.

The second number (425) specifies the number of threads over a circular distance of 1" (25.4mm).

A standard thread size of 9-425 has a Major Diameter of: 4.5 mm ($9 \times 0.3302 + 1.524$) and has 56 threads per 25.4mm.

Note: It is also important to match the pitch of the cap threads to the pitch of the vial for optimal performance.

Larger screw thread sizes typically use a fraction in inches to identify Major Diameter, so a 1/4-20 screw has a Major Diameter of 1/4". Much smaller screw sizes will use a 'gauge' number such as 0, 1, 2, 3 etc. to identify Major Diameter.