

# Sample Handling and Consumable/Vessel Recommendations

Best Practices

## Sample Handling

Take the following into account when handling samples:

- Standard vials can best be filled by means of a narrow-end pipette to allow air to escape when filling the vial.
- Do not fill vials/wells to the edge. If you do, sample will be forced into the air needle of the autosampler, risking cross-contamination of samples and soiling the needles.
- It is important that seals and capmats are airtight to prevent air bubbles from forming and to block evaporation of volatile samples. We recommend use of the following seal types:
  - for **standard (low) well plates**: sealing tape
  - for **deep well plates**: pierceable capmats (Pre-slit or silicon) or sealing tape
  - for **vials**: standard septa (thin types). Do not use vials with hard caps that are not designed for being pierced by an injection needle (do not use e.g. Eppendorf SafeLock micro test tubes).
- When you use uncapped vials/wells, injection performance may not be to specification.
- Filtering the eluent with 0.2  $\mu\text{m}$  filter will considerably reduce the risk of clogging. The same applies for the samples. Make sure you use the appropriate filter material for sample filtration.

## Minimum Sample Volumes

- Standard chromatography vials have a minimum working volume is **500  $\mu\text{L}$** .
- For low recovery vials or those with inserts the working volume will vary.
- 96 Well Plates have a minimum working volume of **200  $\mu\text{L}$** .

## Consumable and Vessel Recommendations

These are the approved consumables that have been tested and certified to work with ZipChip.

- Chromatography Vials - [C5000-94W](#) (ThermoFischer Scientific, 9mm Non-Assembled Amber Screw Thread Wide Opening Autosampler Vial Kits)
- 96 Well Plates - [249944](#) (ThermoFisher Scientific, Nunc 96 Well, V-Bottom, Polypropylene, 0.45 mL)
- Well Plate Covers - [AB0626](#) (ThermoFisher Scientific, SEAL, SELF-ADHESIVE-FOIL, SAMPLE PLATE)

### Customer Service

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