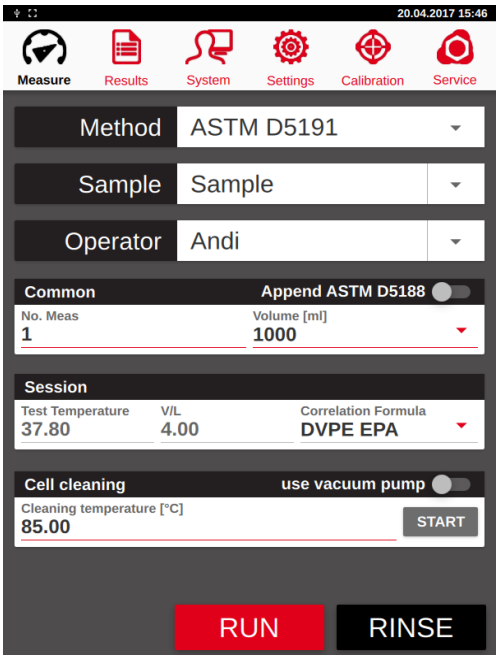
9 Cleaning – Manual Rinsing

Rinsing of the measurement cell is very important to avoid cross contaminations from the previous sample. ERAVAP automatically rinses with the sample to be measured when a measurement is started. This is usually sufficient for gasoline type samples. However, additional rinses can be performed by pressing the *"RINSE"* button in order to clean the measuring cell. Once the *"RINSE"* button is pressed by default 5 rinsing cycles of the measurement cell are performed. The number of rinse cycles can be set in the *"Settings"* menu.



Do not use acetone for rinsing for EV20! Acetone will attack the sealing material of the high-pressure valves and they will be irreversibly damaged!

For EV10 acetone does not pose any eminent danger to the valves, but it is recommended using isopropanol instead.

9.1 Cleaning procedure for high Ethanol content samples

Gasoline samples with higher ethanol content may cause cross contaminations if low or non-ethanol content gasoline is measured afterwards. Residues of samples with elevated (>25Vol%) ethanol concentrations can cause a high-pressure bias for subsequently measured samples and about 3 rinses (3x5 rinse cycles) with a non-ethanol gasoline are required to purge the measurement cell.

9.2 Cleaning procedure for Crude oil samples

When measuring crude oil it is important to clean the system after the measurement to avoid clogging of the valves and to clean the measuring cell. Manually rinse the measurement cell twice (2x5 rinsing cycles) with toluene by pressing the *"RINSE"* button in the *"Measure"* menu. If the color of the toluene at the outlet of the instrument is still dark, repeat the rinsing. As soon as the toluene is almost colorless, rinse twice with air in order to clean the measurement cell properly.

If the instrument is not rinsed within one hour after the measurement a warning message will be shown. This message also appears when trying to shut down the instrument without having it rinsed after a D6377 measurement.

9.3 Cleaning procedure water containing samples

If there is some water in the measurement cell it will certainly influence the measurement results. Additionally, it is difficult to remove water by solely purging the system with gasoline samples. Use ethanol or isopropanol to remove it from the measurement cell. Rinse about three times (3x5 rinse cycles) and then three times with gasoline. If the results are still influenced by water residue repeat the cleaning procedure.

9.4 Cleaning procedure for highly viscous samples

High viscous samples increase the risk of clogging the measuring system when the temperature of the cell is lowered (instrument turned off). For this reason, rinse the system after the measurement with 2-propanol, toluene or any other suitable substance that can dissolve the viscous sample at least two times.