

Workstation with three Fluid-PermCell NW50-liquid Step by Step Guide

Determination of the chemical permeation of liquid or gaseous test chemicals with a continuous contact to the protective clothing or glove material sample and the liquid collection medium deionized water
EN 16523-1 (replacement for EN 374-3)

The workstation with **three** Fluid-PermCell NW50-Liquid consisting of:



Art.-Nr.: **3x** 280-0354356
Fluid-PermCell NW50-liquid



Art.-Nr.: **3x** 220-0287609
magnetic stirrer MIX 1 eco



Art.-Nr.: **1x** 230-0207607
Digital Peltier-Thermostat PT31.



Art.-Nr.: **1x** 170-0913034 MultiLine® Multi 3630 IDS

Optional sensors for measuring conductivity, pH or redox potential:



Art.-Nr.: **3x** 170-0290890
TetraCon® 925
IDS conductivity sensor



Art.-Nr.: **3x** 170-0303880
SenTix® 940
IDS pH-sensor



Art.-Nr.: **3x** 170-0401043
SenTix® ORP-T 900
IDS Redox-sensor



Delivery condition of the permeation cells Fluid-PermCell NM50-liquid.



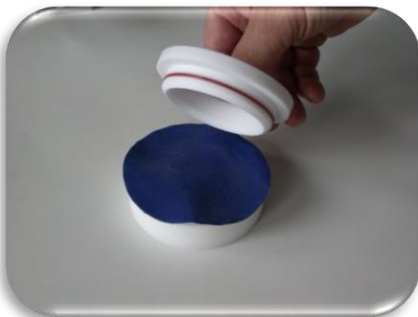
Disconnect hose connections via quick coupling.



Loosen all 4 screw connections per cell.



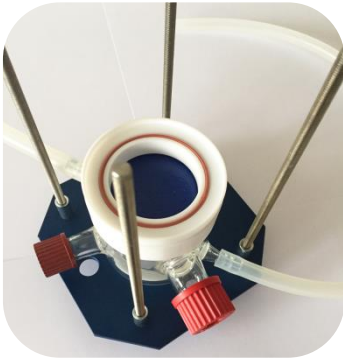
Remove PTFE sample holders.



Place the material sample on the lower side of the sample holders.



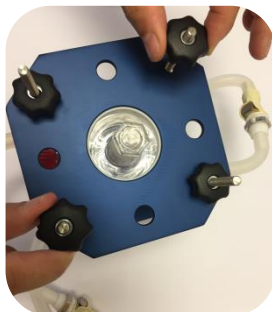
Assemble the upper and lower parts of the sample holders.



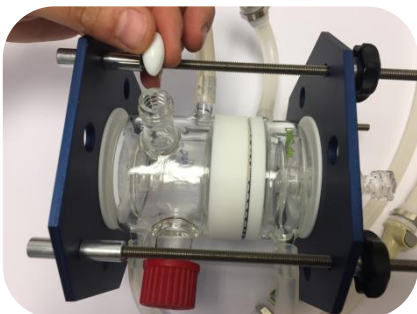
Place sample holders in the fixtures.



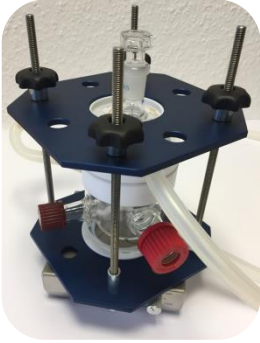
Insert the upper glass vessel and connect the hose connections via quick-release couplings.



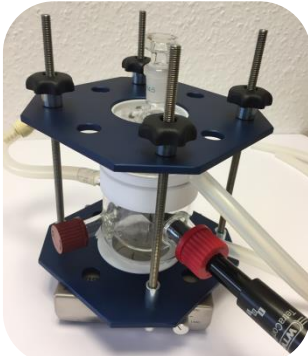
Fit the aluminium ring plates and tighten all 4 screws diagonally per cell.



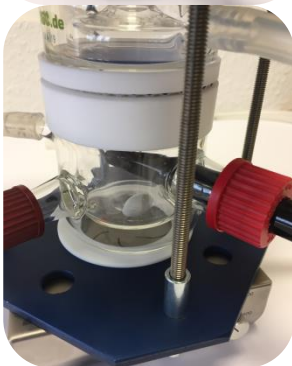
Place the magnetic stirring rods in the test cells.



Place the assembled permeation cells on the magnetic stirring plates.



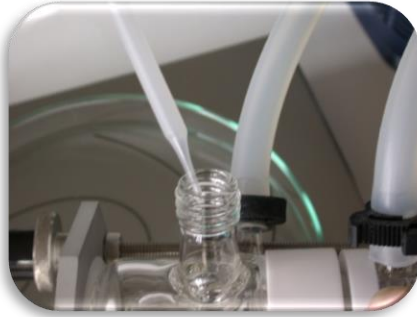
Insert the conductivity, pH or redox electrode into each cell.



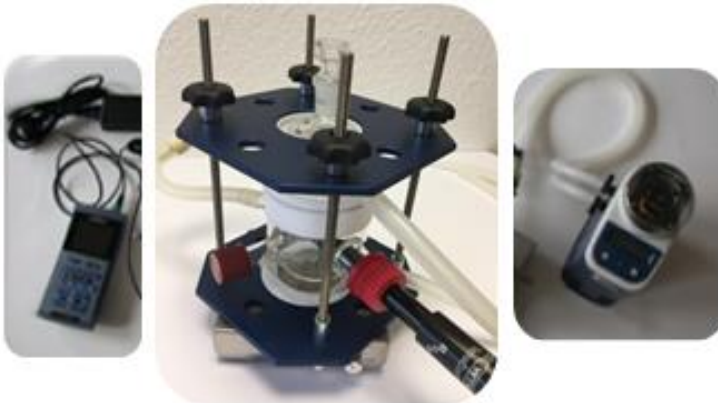
Connect supply and discharge lines to each other and connect to Peltier thermostat.



Open the thermostat and fill it with water in portions until the air is removed from the hose system.



Fill each cell with the deionized water collected via GL25 nozzles, bubble-free, into the measuring cell.



Connect the Multi3530 IDS and start up all devices and temper the cells to 23°C ($\pm 1^\circ\text{C}$).



Apply the 3 different test chemicals for each cell individually to the material sample via the NS14 grinding and note the time (=start time!).

Hints:

The respective test chemical should be tempered to 23°C ($\pm 1^\circ\text{C}$) before addition. The test chemical must completely wet the material sample. The single half in the operating manual for the measurement in 3 cells, the illustration is based on a Cell reduced!