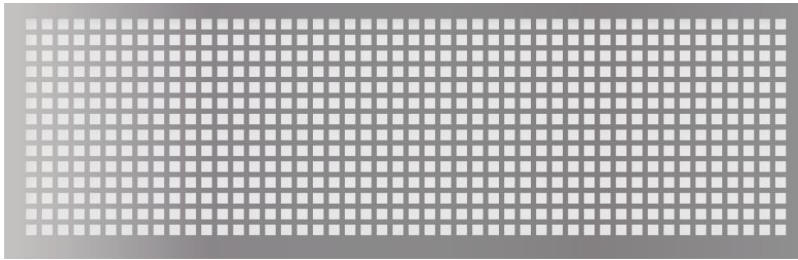


## Product: Droplet Microarray

Droplet Microarrays are transparent and completely planar arrays consisting of hydrophilic spots separated by superhydrophobic barriers based on Aquarray's patented technology.



E.g.: "X-xx-102": DMA with 672 spots of 1mm size

## Substrate types

### Borosilicate glass: G

This substrate is used for standard chemical and biological work.

The dimensions of the glass slide are 75,6 x 25 x 1 mm.

### ITO-coated glass: I

Conductive and IR-reflective properties of the additional indium-tin oxide (ITO) coating make AQUARRAY's Droplet Microarray compatible with applications such as on-chip MALDI-TOF mass spectrometry or IR spectroscopy.

The dimensions of the glass slide are 75 x 25 x 1,1 mm.

## Surface types

### Surface type: np

A surface compatible with aqueous media. The static water contact angle of the superhydrophobic borders have a value of  $>158^\circ$ . The hydrophilic areas have a static water contact angle of  $<10^\circ$ . **The coated surface must not be touched** with gloves or tweezers **to avoid the damage of the coating.**

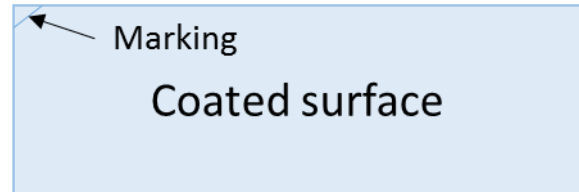
### Surface type: dd

A surface compatible with both aqueous and organic solutions. The static water contact angle of the omniphobic borders have a value of  $>108^\circ$ . The omniphilic areas have a

static water contact angle of  $<40^\circ$ . **The coated surface should not be touched** with gloves or tweezers **to avoid the damage of the coating**.

## Orientation of the DMA slides

Droplet-Microarray (DMA) slides are transparent slides with top surface coated and bottom surface non-coated. Before taking the slide out of the falcon tube, examine the slide and find the coated surface by a marking at the upper left corner (see the figure on the right). The Droplet Microarray slide can be held with gloves on the sides or with tweezers at the very corner. The Droplet Microarray can be placed in Petri dish or another container on the non-coated surface.



## Sterilization of DMA slides

1. Insert one transparent DMA slide into 50 mL falcon tube containing 45 mL of 100 % ethanol for 1 minutes (do not incubate in ethanol longer than 10 minutes).
2. Remove the transparent DMA slide from ethanol under the clean bench and place it **on non-coated surface** onto the edge of an open sterile Petri dish to dry at least for 15 minutes until all ethanol evaporated.

## Preparation of Petri dishes with humidified lids.

1. Open the lid of the petri dish and place it upside down under clean bench.
2. Place a sterile humidifying pad into the Petri dish lid using sterile tweezers.
3. Add 8-10 mL of sterile humidifying buffer to the lid and let it evenly spread over the whole surface of the pad. Important: the pad must be fully wetted; extra liquid might cause detachment of the pad and must be collected with a sterile pipet from the edge of the lid.
4. If some air is trapped between the pad and the lid squeeze it out with a tip of the pipette.
5. Leave the petri dish at 37°C in the cell incubator and add the DMA after dispensing if the cells in the lower part containing 4 mL Humidifying Buffer.

## Storage conditions

Droplet-Microarray (DMA) slides should be stored in a dark and dry place under room temperature. They can be stored up to 12 months.