

# Chip Identification Sheet

## Standard Library

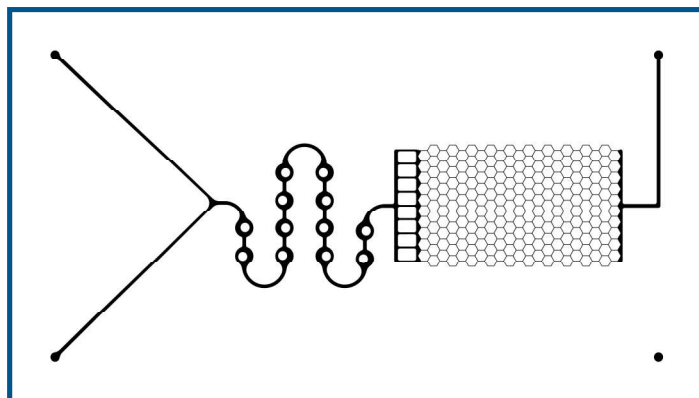


## Mixing S100 Chip

### Hexagonal Porous Media Chip with Mixing Rings

The Mixing S100 Chip includes a hexagonal, homogeneous porous medium and built-in mixing rings. It enables the co-injection of fluids for on-chip mixing, along with real-time visualization and measurement of fluid performance.

The chip is especially useful for studying foam stability by examining how salinity, temperature, pressure, gas type, and flow rate influence foam behaviour. It also helps assess how foam slows the flow of injected gas, enhancing oil production efficiency.



#### Chip Profile

|            |                                       |
|------------|---------------------------------------|
| Dimensions | 38 x 21 x 2.75 mm                     |
| Components | Silicon Base 1.00 mm<br>Glass 1.75 mm |

#### Supports

|             |                              |
|-------------|------------------------------|
| Chip Holder | Screw Top<br>Liquid Confined |
| Ports       | 3                            |

#### Porous Media

|                 |                                                |
|-----------------|------------------------------------------------|
| Hexagonal Media | 30 $\mu\text{m}$ wide<br>10 $\mu\text{m}$ deep |
|-----------------|------------------------------------------------|

#### Mixing Rings

|                |        |                       |                                                 |
|----------------|--------|-----------------------|-------------------------------------------------|
| Inner Diameter | 0.5 mm | Radially Displaced by | 0.05-0.1 mm                                     |
| Outer Diameter | 1.0 mm | Foam Generator        | 200 $\mu\text{m}$ wide<br>10 $\mu\text{m}$ deep |

#### Fluid Analysis Applications

Foam Rheology  
Emulsions