Chip Identification Sheet

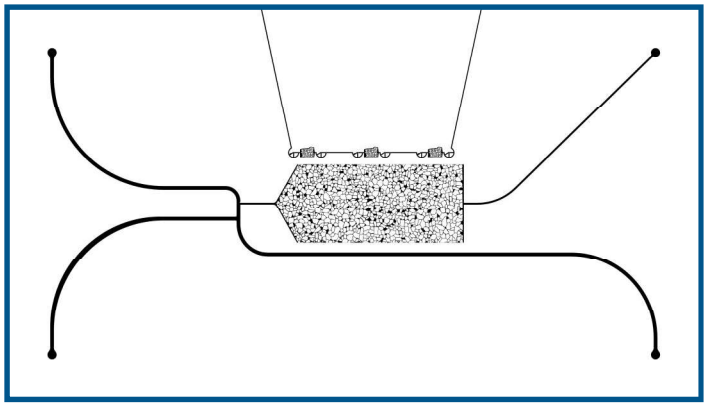
Standard Library

EOR S120 Chip

Enhanced Oil Recovery Heterogeneous Porous Media Chip with 21.2% Porosity, 15 µm Depth, 550 mD Permeability

The EOR S120 Chip is a platform chip used to study a wide variety of fluid interactions in porous media, including polymer and chemical injection for Enhanced Oil Recovery, wax appearance temperature, wax/scale/asphaltene inhibition, and carbon dioxide and hydrogen storage.

The chip is particularly effective as a screening tool, designed to identify the most effective polymer and polymer concentration for EOR operations. It enables visualization and quantification of oil displacement performance, while also revealing potential formation damage mechanisms caused by injected polymers.



Chip Profile	
Dimensions	38 x 21 x 2.75 mm
Components	Silicon Base 1.00 mm Glass 1.75 mm
Supports	
Chip Holder	Screw Top Liquid Confined
Ports	4
Channels	
Inlet Channels	200 µm wide 70 µm deep
Outlet Channels	50 µm wide 15 µm deep

Porous Media	
Dimensions	17 mm x 5 mm
Porosity	21.2%
Pore Throats	10-20 µm wide 15 µm deep
Volume	130.6 nL
Permeability	550 mD calculated

Fluid Analysis Applications	
Enhanced Oil Recovery - Chemical Injection | Polymer Injection	Hydrogen Storage
Waterflood	Carbon Dioxide Storage
Wax Appearance Temperature	Scale Inhibition
Wax Inhibition	Asphaltene Inhibition

SKU 30044