DATASHEET

Droplet Generation Microfluidic Chip, PDMS/Glass, 100µm Channel, Flow-Focusing, Plasma-Bonded, with PTFE Tubing & Fittings Kit, 75x25mm Slide, for Lab Research (RUO)

Flow-focusing microfluidic chip with 100×100 µm channels, RTV615 PDMS plasma-bonded to borosilicate glass. Includes PTFE tubing and fittings for plug-and-play monodisperse droplet generation in lab research (RUO).

APPLICATION

Materials Characterization, Microfluidics & Life Science

KEY SPECS

- Material: RTV615 PDMS / Borosilicate Glass
- Channel Geometry: Flow-Focusing
- Channel Width: 100 µm
- Channel Depth: 100 µm

1. Specifications

Material	RTV615 PDMS / Borosilicate Glass
Channel Geometry	Flow-Focusing
Channel Width	100 µm
Channel Depth	100 µm
Chip Format	75 × 25 (Slide) mm
Substrate Thickness	1 mm
Port Size	0.7 (22-gauge compatible) mm
Bonding	Oxygen Plasma (Permanent)
Fabrication Tolerance	±5 µm
Operating Pressure	≤ 0.3 MPa
Research Use	For Research Use Only (RUO)

2. Product Details

The Droplet Generation Microfluidic Chip uses a flow-focusing geometry with 100 µm-wide × 100 µm-deep channels to generate monodisperse droplets for research applications. RTV615 PDMS is permanently oxygen-plasma-bonded to 1 mm borosilicate glass, providing a leak-free seal and excellent optical clarity for both brightfield and fluorescence imaging. Each chip is fabricated via soft lithography with ±5 µm tolerance and individually quality-checked; measured channel-width data is shipped with every unit. The kit includes PTFE tubing, blunt needle tips and a syringe — 0.7 mm inlet/outlet ports are compatible with standard 22-gauge fittings, so the chip runs out of the box. Standard 75×25 mm slide footprint fits common chip holders. Ideal for droplet microfluidics, digital PCR workflows and single-cell research. **For research use only (RUO). Not for use in diagnostic or therapeutic procedures.**

In stock at Amazon warehouse, ship same day: https://www.amazon.com/dp/B0H6PBG64L

3. Order / Quote

Model	Pack Size	Availability
LC-DG-700005	1× PDMS/glass chip (75×25 mm), 1× PTFE tubing set, 2× blunt needle tips, 1× syringe, 1× sealed ESD bag with RUO label	In stock (Amazon / US warehouse)

Current pricing and ordering: labcorematerials.com/products/droplet-generation-microfluidic-chip/

4. Shipping & Compliance

- Ships as empty microfluidic hardware. No reagents, no biological materials. Not classified as dangerous goods.

Contact

business@labcorematerials.com

www.labcorematerials.com/products/droplet-generation-microfluidic-chip/