



# Handling Instructions for PermeaPad® Skin Barrier

Introduction: The PermeaPad® Skin Barrier is a directional membrane system designed for permeability studies. It consists of two inseparable layers:

- The rough white side must face the donor compartment.
- The transparent, film-like shimmering side must face the acceptor compartment. **Do not separate the membranes; they function as a single unit.**



A video demonstrating the process is available here: <u>Video Handling Barrier Franz</u> <u>Cell.MOV</u>

→ This is not a professional video and was recorded for the prototype testers with one hand!

# Step-by-Step Handling Instructions:

## 1. Prepare the Franz Cell:

- Fill the acceptor chamber with the acceptor buffer and place the stirring bar inside.
- Invert the donor chamber onto a flat surface and position the O-ring/sealing ring on it.

### 2. Hydrate the PermeaPad® Skin Barrier:

- Confirm the correct orientation of the membrane before proceeding.
- Using tweezers, immerse the membrane briefly (e.g., 1 second) in a beaker containing the buffer (e.g. PBS buffer or acceptor buffer).
- Gently swirl the membrane to ensure uniform wetting (see video for visual guidance).





# 3. Place the Membrane:

- Carefully position the wet membrane onto the prepared donor chamber.
- Ensure that the white (filter) side faces downward toward the donor compartment.

#### 4. Remove Air Bubbles:

- Air bubbles may form between the layers due to different expansion coefficients.
- Using tweezers, carefully tap out the air bubbles without puncturing the barrier.

### 5. Assemble the Franz Cell:

- Once air bubbles are removed, position the donor chamber with the membrane onto the acceptor chamber as usual.
- Check for air bubbles in the permeation area or under the barrier in the acceptor chamber.
- If bubbles are present, disassemble and repeat the previous step to remove them.

# 6. Start the Experiment:

- Ensure the setup is bubble-free.
- The PermeaPad® Skin Barrier is now ready for immediate use.

# Important Notes:

- Always verify membrane orientation before use.
- Handle with care to avoid damage.
- Follow the protocol to ensure optimal results.

For further information or troubleshooting, refer to the instructional video or contact technical support: <u>info@phabioc.com</u>

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