

MB012, MB002 Gel

MB002 and MB012 are Gelsight’s low-friction thermoplastic-elastomer (LF-TPE) gel formulation. MB012 is the Series 2 gel cartridge form factor, and MB002 is the Series 1 gel cartridge form factor. LF-TPE gels can be recognized by their matte appearance. The presence of microspheres at the surface of the membrane allows air to be evacuated through the micro-channels when inspecting negative features. LF-TPE gel is recommended for applications that require air egress, including scratch, dent, and defect characterization.

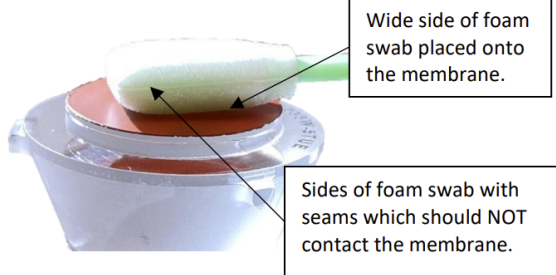
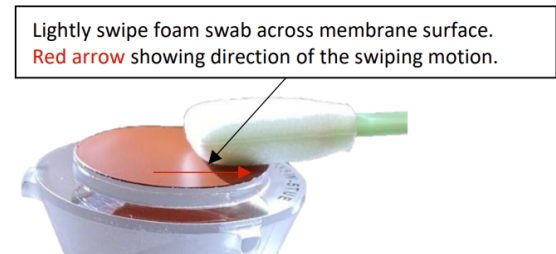


Figure 1: MB012 for Series 2 (left), MB002 for Series 1 (right)

Cleaning Instructions

Use a dry foam swab to gently swipe any dust or debris off the surface of the gel membrane. Alternative cleaning tools or methods may result in premature gel wear. Gelsight recommends the following swab: 1” Wide Foam Swab [reference: Uline part number S-25213]

Note, DO NOT use any type of isopropyl alcohol (IPA) on the foam swab or directly on the gel itself.

<p>Gently place the wide side of the foam swab onto the membrane surface.</p> <p>Note: Do not use the sides of the foam swab with seams as it will damage the membrane. Do not press foam swab into the membrane/gel as it can damage the membrane.</p>	 <p>Wide side of foam swab placed onto the membrane.</p> <p>Sides of foam swab with seams which should NOT contact the membrane.</p>
<p>Without applying downward pressure onto the foam swab, carefully swipe the foam swab in a single direction across the membrane.</p> <p>Note: Keep the surface of foam swab parallel to the membrane, do not angle the foam swab up or down as it may damage the membrane.</p>	 <p>Lightly swipe foam swab across membrane surface. Red arrow showing direction of the swiping motion.</p>

Gel Wear and Replacement

The lifespan of a gel cartridge is application dependent. To prolong the lifespan of the gel, it is recommended to apply force normal to the inspection surface, or to roll the gel onto the inspection surface as pictured in Figure 2. It is important to avoid any application of shear forces to the gel membrane.

The simplest way to keep the gel free of any debris is to clean the inspection surface before acquiring a scan. Exposure to machine oils or isopropyl alcohol will cause premature wear.

Replacement of the gel is recommended if any wear is present through the red pigment layer, or if an excessive amount of debris is present within the measurement regions.

Gel cartridges are a consumable and replacements can be purchased directly through Gelsight’s online store: <https://www.gelsight.com/online-store/>

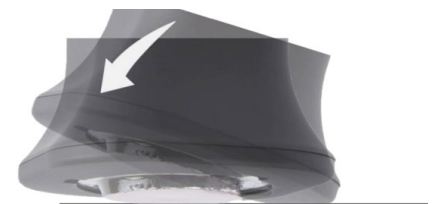


Figure 2: Rolling a Series 1 gel onto the inspection surface