



100% gel-free ultrasound proceduresSM

envisionTM



Just Add Water

Envision by CIVCO Medical Solutions is a viral barrier which enables 100% gel-free ultrasound procedures. The Envision ultrasound products are activated with a sterile liquid and require no gel, which:

- reduces the risk of contamination
- can improve the quality of FNA specimens
- simplifies workflow



Reduce the Risk of Contamination

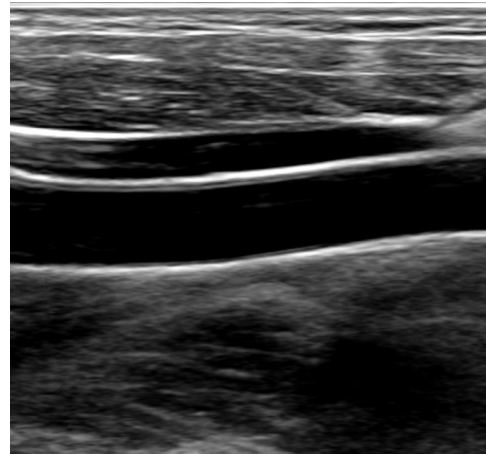
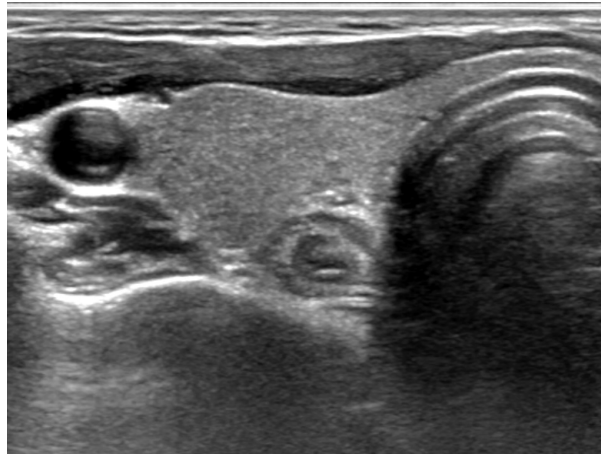
Based on multiple clinical studies, ultrasound gel has been shown to harbor and spread infection. Gel can:

- contribute to increasing nosocomial infection, the spread of hospital acquired infections^{1,2,3,4}
- cause bacteria to be introduced into the blood stream^{3,6}
- make the disinfection or sterilization process of devices, including ultrasound probes, less effective⁵

Envision enables gel-free ultrasound procedures, reducing the risk of contamination during needle-guided interventions or while scanning non-intact skin.

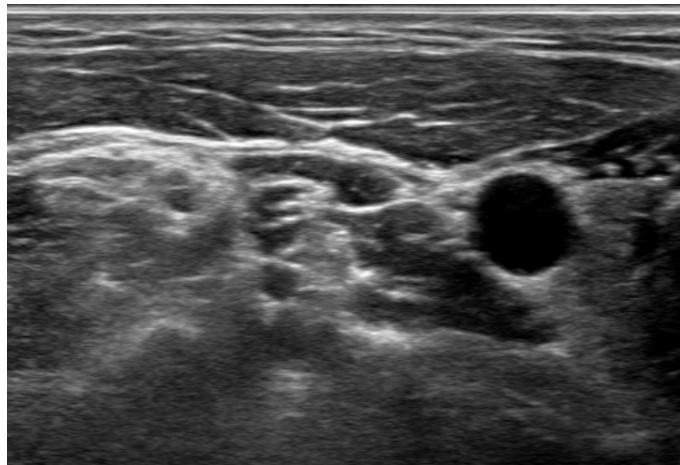
Evidence of device safety based on biocompatibility, sterilization and other non-clinical testing.





Envision Enables Trusted Image Quality

Use a sterile liquid to scan with Envision for reliable ultrasound images



Improve Quality of FNA Specimens

Envision covers can help improve the visibility of cells in FNAs by eliminating the need for gel from these procedures. Several studies show the adverse effects gel can have on fine needle aspirations:

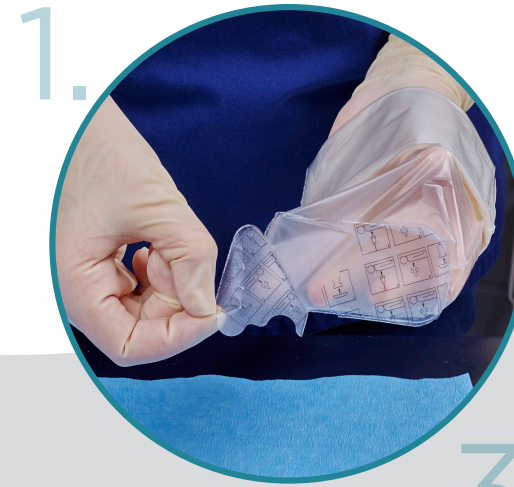
- Impairs the visibility of cells and interferes with staining of cells⁷
- Causes a significant increase in the number of slides with artefacts⁷
- Causes widespread cell lysis, increasing the risk of misinterpretation and a false positive diagnosis⁸
- Mimics colloid, creating difficulty in differentiation between artefact and colloid^{7,9}



Simplify Workflow

The Envision cover is easy to set up with the quick-peel liner that safely adheres to the probe face, and clean-up is simple with no gel to wipe off the probe or patient. Pre-cleaning of the probe is greatly simplified with the use of Envision.

1. Place hand into cover to stretch out the liner and remove liner to expose silicone adhesive.
2. Position adhesive onto probe face, then pick up probe with hand still in cover to allow easy deployment down the length of probe handle and cord.
3. Reposition cover over probe face to remove wrinkles, if needed.
4. Apply generous amount of sterile liquid to target anatomical area of patient and start scanning.
5. Simply remove the cover following procedure by peeling the adhesive from the probe face.

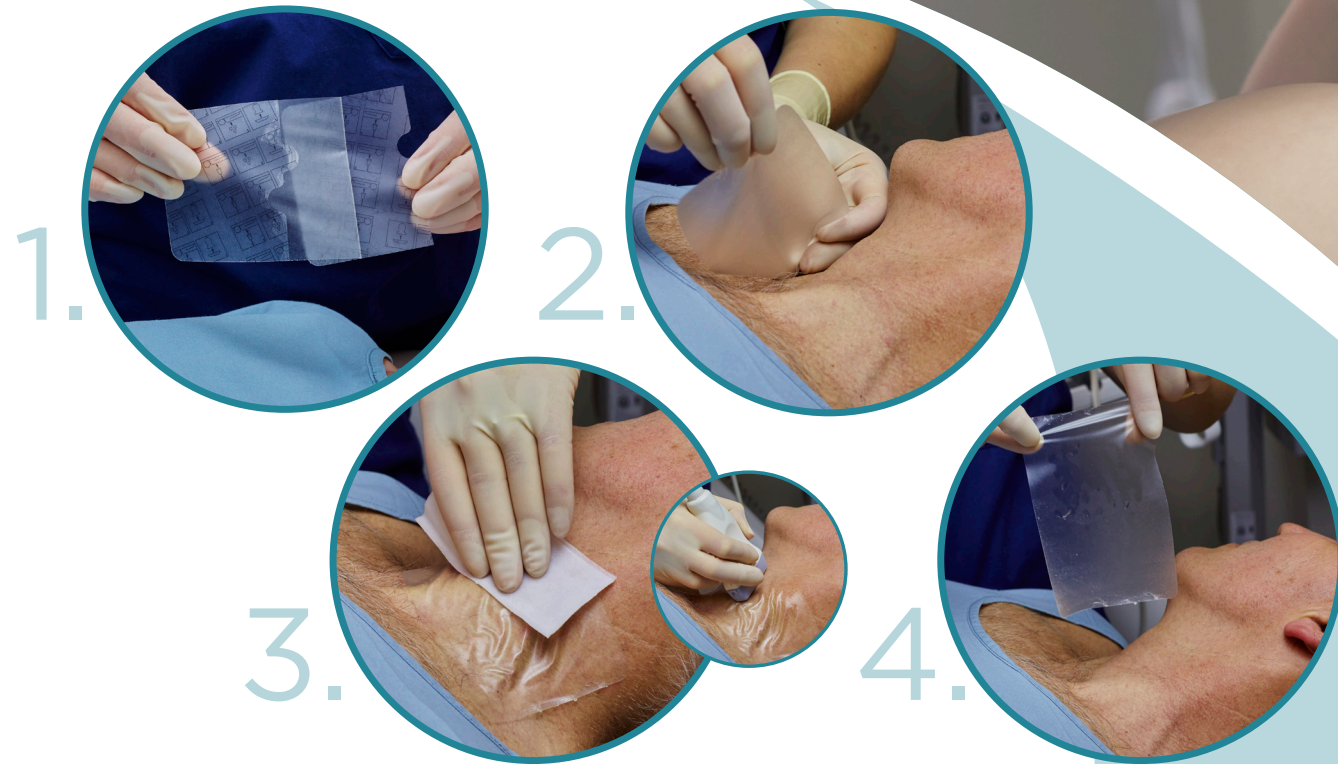


Envision Pad

The Envision Pad can be adhered to the patient or the probe and can be used to scan non-intact or sensitive areas. Envision's design includes a silicone adhesive, which is useful when applied to patients with fragile skin due to low skin trauma on removal¹⁰.

Adhering sterile pad to the patient:

1. Remove liner to expose silicone adhesive.
2. Apply adhesive side to target anatomical area of patient.
3. Apply generous amount of sterile liquid to the top of the pad and begin scanning.
4. Simply peel off the pad once scanning is complete.



Just Add Water



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Bibliography

1. Oleszkowicz SC, Chittick P, Russo V, Keller P, Sims M, Band J. "Infections Associated with Use of Ultrasound Transmission Gel: Proposed Guidelines to Minimize Risk" *Infection Control and Hospital Epidemiology* Dec. 2012, vol. 33, no. 12
2. Esteban C, Nannini, Adriana Ponessa, Rosa Muratori, Patricia Marchiari, Viviana Ballerini, Luis Flynn, Adriana S. Limansky "Polyclonal outbreak of bacteremia caused by *Burkholderia cepacia* complex and the presumptive role of ultrasound gel" *The Brazilian Journal of Infectious Diseases* 2015;19(5):543-545
3. Shaban RZ, Maloney S, Gerrard J, Collignon P, Macbeth D, Cruickshank M, Hume A, Jennison AV, Graham RMA, Bergh H, Wilson HL, Derrington P "Outbreak of health care-associated *Burkholderia cenocepacia* bacteremia and infection attributed to contaminated sterile gel used for central line insertion under ultrasound guidance and other procedures" *AJIC* 45 (2017) 954-8
4. Centers for Disease Control and Prevention "Pseudomonas aeruginosa respiratory tract infections associated with contaminated ultrasound gel used for transesophageal echocardiography - Michigan, December 2011-January 2012." *MMWR Morb Mortal Wkly Rep.* 2012 Apr 20;61:262-4.
5. William A. Rutala, Ph.D., M.P.H.1,2, David J. Weber, M.D., M.P.H.1,2, and the Healthcare Infection Control Practices Advisory Committee "CDC - Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008" www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines.pdf
6. Australian Government Department of Health Therapeutic Goods Administration "Safety Advisory – risk of bacterial contamination" 2017 <https://www.tga.gov.au/alert/meditech-ultrasound-gel>
7. A. Lalzad, D. Ristitsch, W. Downey, A. F. Little and M. E. Schneider-Kolsky "Effect of ultrasound transmission gel on ultrasound-guided fine needle aspiration cytological specimens of thyroid" *Cytopathology* 2012, 23, 330–333
8. A. J. Molyneux, S. B. Coghill "Cell Lysis Due to Ultrasound Gel In Fine Needle Aspirates; an Important New Artefact In Cytology" *Cytopathology* 1994 5, 41-45
9. Royer MC, Davidson DD, Dimitrov RK, Kuo CY, Kokaska MS "Ultrasound gel causes fine needle aspiration artifact? A clear choice." *Acta Cytol.* 2012;56(2):146-54
10. Selecting the right medical adhesive tape *Challenges facing the medical device designer* Maggie G. Tebrake, PhD - Technical Specialist, Medical Specialities, 3M