

3M™ Tegaderm™ Family of Transparent Film Dressings
Product Profile

Tegaderm™ Transparent Film Dressing Family



Simple.
Dependable.
Trusted.



3M™ Tegaderm™ Transparent Film Dressings

Featuring a broad portfolio of sizes, shapes and delivery systems, 3M™ Tegaderm™ Transparent Film Dressings provide clinicians and patients with a solution for every transparent dressing need.

Tegaderm™ Transparent Film Dressings consist of a thin film backing with a hypoallergenic, latex-free adhesive that gently, yet securely, adheres to skin. Tegaderm™ Transparent Film Dressings are breathable, sterile, transparent and waterproof, and provide a barrier to external contaminants.

Specially designed Tegaderm™ Transparent Film Dressings, with unique shapes and securing tapes provide solutions for difficult to dress wounds and I.V. catheters.

Simple.
Dependable.
Trusted.

Indications For Use

Tegaderm™ Transparent Film Dressings can be used to cover and protect catheter sites and wounds, to maintain a moist environment for wound healing or to facilitate autolytic debridement, as a secondary dressing, as a protective cover over at-risk skin, to secure devices to the skin and as a protective eye covering. Common applications include a variety of I.V. catheters and other percutaneous devices, such as:

- Peripheral and midline catheters
- Subclavian and jugular catheters
- PICC lines (peripherally inserted central catheters)
- Pulmonary artery catheters
- Tunneled catheters and implanted ports
- Epidural catheters
- Dialysis catheters
- Subcutaneous insulin catheters
- Umbilical catheters

Applications for wound management and site protection include:

- Clean, closed surgical incisions
- Skin graft donor sites
- Stage I or II pressure ulcers
- Superficial wounds such as abrasions, skin tears and blisters
- First-and second-degree burns
- Protective cover to prevent skin breakdown
- Secondary dressing over gauze, alginates or hydrogels
- Protective eye covering



Product Features and Benefits

Transparent

- The transparency of Tegaderm™ Transparent Film Dressings provides complete visibility of the insertion site during application and on-going monitoring of the I.V. site or wound.

Ease of application

- Application of Tegaderm™ Transparent Film Dressings is intuitive and quick, minimizing application time and reducing dressing waste.
- The unique “picture-frame” delivery system allows precise and secure placement of the dressing, while the bordered frame provides maximum control of the thin film of even the largest dressings.
- Should the adhesive surface accidentally touch itself, the dressing can be separated and applied, minimizing waste.

Breathable

- Tegaderm™ Transparent Film Dressings are made of semi-permeable films and can be considered selective filters – they are occlusive to liquids, bacteria, and virusesⁱ; yet water vapour, oxygen, and carbon dioxide can easily be exchanged.
- The breathability of Tegaderm™ Transparent Film Dressings allows moisture vapour and gas exchange, essential to maintaining normal skin function under the dressing.
- Patients can wear Tegaderm™ Transparent Film Dressings for extended periods of time, with minimal risk of skin irritation or maceration, and without excessive proliferation of skin flora.

Waterproof, sterile barrier

- Tegaderm™ Transparent Film Dressings act as a barrier to protect the I.V. site or wound from external contaminants such as bacteria, virusesⁱ, blood and body fluids.
- Patients may bathe, shower or swim, if the dressing is completely sealed around the catheter or wound.

Gentle Adhesive

- Tegaderm™ Transparent Film Dressings are made with a hypoallergenic, latex-free adhesive that is gentle to the skin, securely holding catheters and other devices in place.
- Even for dressings left in place for extended periods, the risk of patient discomfort and skin trauma is minimal when the dressing is properly removed.

Conformable

- Tegaderm™ Transparent Film Dressings conform to body contours, stretches easily and prevents stress on the skin when the patient moves.
- The unique shapes of Tegaderm™ Transparent Film Dressings conform easily on difficult-to-dress areas, such as jugular and PICC insertion sites, and sacral wounds.

i. Laboratory testing has proven Tegaderm™ Transparent Film Dressings provide a viral (HIV-1 and HBV) barrier while dressings remain intact without leakage.

Enhanced wound healing

- Tegaderm™ Transparent Film Dressings seal in natural wound fluid to maintain a moist environment, preventing scab formation and dehydration of the wound bed, which has been shown to enhance the healing process.⁶⁻¹²

Clinically proven

- Tegaderm™ Transparent Film Dressings are supported by more clinical studies than any other brand of transparent dressings.
- Internationally recognized I.V. guidelines base site care recommendations on clinical studies using Tegaderm™ Transparent Film Dressings.
- Tegaderm™ Transparent Film Dressings are as safe as gauze and tape, and even when worn for longer periods of time, Tegaderm™ Transparent Film Dressings did not increase the risk of I.V. catheter-related bacteremias.^{14,15,20,21}

Fewer dressing changes

- With Tegaderm™ Transparent Film Dressings, fewer dressing changes means improved patient comfort and reduced risk of skin trauma as a result of repeated adhesive removal.
- For I.V. site care, fewer dressing changes results in less catheter manipulation and reduced exposure to potential outside contaminants.
- For wound application, the longer wear time of Tegaderm™ Transparent Film Dressings allows wounds to remain undisturbed, preventing disruption of the healing process.

Cost effective

- The INS Standards of Practice and HICPAC/CDC Guidelines for the Prevention of Intravascular Catheter-Related Infection supports longer wear times for transparent dressings than tape and gauze dressings for I.V. applications.¹³
- Less frequent dressing changes saves nursing time and supply costs, including skin preps, gloves and dressing materials.

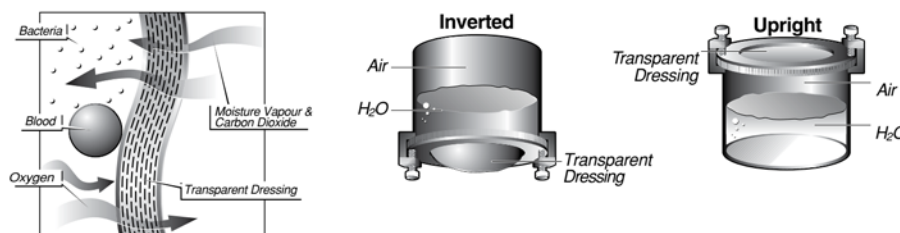
Radiologically Transparent

- Tegaderm™ Transparent Film Dressings are radiologically transparent. Removing the dressing from a patient prior to x-ray is not necessary.

MVTR (Moisture Vapour Transmission Rate)

Moisture vapour transmission rate (MVTR) is the measurement of water vapour diffusion through a material.

Two laboratory test methods are commonly used to measure MVTR. The results of these two tests are often used to compare transparent dressings for I.V. use; however, they do not represent real life conditions, and numerous variables can impact the results. This raises the question of whether laboratory test data for MVTR can accurately predict dressing performance in clinical practice.



The inverted beaker test produces higher numbers with greater variability. These variances are seen within samples of the same dressing, as well as among different products. This inconsistency occurs because the films can stretch and swell due to the water pressure against the test dressing, increasing surface area measured.

The MVTR values produced by the upright method are lower and more consistent among different products, and within samples of the same dressing. Due to the fact that the liquid does not come in contact with the film in this test method, stretch and swell are not factors in the results.

Aside from the test method chosen, many other variables can significantly affect MVTR values:

- Volume of liquid in the test beaker (generally 10-50 ml)
- Concentration of substances in the liquid (salt, proteins)
- Type of liquid medium (water, saline)
- Environmental conditions (temperature, humidity)

MVTR bench tests are generally performed under tightly controlled temperatures and low relative humidity. In clinical settings, where temperatures and humidity vary considerably from the typical conditions, MVTR values will be much different than those produced in the laboratory. For example, under conditions of high humidity, moisture vapour transmission will proceed at a much slower rate.

A third, less common method, uses computerized evaporimetry to measure moisture handling properties of transparent dressings. This instrument records actual evaporation through the film on skin, and moisture build-up underneath the dressing. When moisture vapour transmission is measured with this device, dressings with significant differences in bench MVTR values show no significant difference in actual moisture accumulation on the skin.

Research studies have been conducted to investigate the effect of MVTR on clinical outcomes for I.V. therapy. The results of these trials do not demonstrate a correlation between higher MVTR values and lower incidence of complications, including catheter-related bacteremia.

In a large, prospective, randomized, clinical trial conducted by Dennis G. Maki, M.D. on Swan-Ganz catheters, there was no evidence to document a beneficial effect of a "higher MVTR" dressing (Opsite[®] IV3000), compared with a standard transparent film dressing (Tegaderm[™] Transparent Film Dressing). The data showed no statistical difference in clinical outcomes (skin colonization, catheter tip colonization or the incidence of catheter-related blood stream infections) between Tegaderm[™] Transparent Film Dressings and Opsite[®] IV3000 dressings.¹⁵

To date, there is no specific clinical evidence to suggest the optimal moisture vapour transmission rate. More important than MVTR in preventing I.V. infections are proper site preparation, sterile insertion technique, and strict adherence to protocols for I.V. site maintenance.



General Application Hints

- Select a dressing size that will adequately cover the catheter and insertion site or wound. Ensure that at least a one inch margin of dressing adheres to healthy, dry skin.
- Prepare the catheter insertion site or wound according to your institution's approved protocol.
- To ensure good adhesion, clip excess hair where the dressing will be placed. Do not shave the skin because of the potential for microabrasions.
- Make sure skin is free of soaps, detergents, and lotions. Allow all preps and protectants to dry thoroughly before applying the dressing. Wet preps and soap residues can cause irritation if trapped under the dressing. Additionally, adhesive products do not adhere well to wet or oily surfaces.
- Do not stretch the Tegaderm™ Transparent Film Dressing during application. Applying an adhesive product with tension can produce mechanical trauma to the skin. Stretching can also cause adhesion failure.
- The adhesive of Tegaderm™ Transparent Film Dressing is pressure-sensitive. To ensure best adhesion, always apply firm pressure to the dressing from the center out to the edges.
- To tailor a dressing for a special application, use sterile scissors to cut the dressing into desired shapes or sizes before removing the printed liner. For best results and ease of application, cut the pieces so that a portion of the frame remains on at least two sides.

Did you know?

Protecting skin with an alcohol-free barrier film, such as 3M™ Cavilon™ No Sting Barrier Film, allows continuous visualization of the skin while protecting it from adhesive trauma associated with repeated dressing changes.

Note: The 28 ml spray bottle should not be used for I.V. site protection.



General Removal Hints

Support the skin when removing Tegaderm™ Transparent Film Dressing. For removal from I.V. sites, also stabilize the catheter to prevent dislodgment. Use one of the following removal techniques based on your patient's skin condition and your own personal preference:

- Gently grasp one edge and slowly peel the dressing from the skin in the direction of hair growth. Try to peel the dressing back over itself, rather than pulling it up from the skin.
- Grasp one edge of the dressing and gently pull it straight out to stretch and release adhesion.
- Apply an adhesive remover suitable for use on skin to the adhesive edge while gently peeling from the skin.

Did you know?

To aid in lifting a dressing edge, secure a piece of surgical tape to one corner and rub firmly. Use the tape as a tab to help you slowly peel back the dressing.

I.V. Dressing Tips

- For added catheter stability, a small strip of non-stretchy tape can be placed over the hub without obscuring the site. If placed under the dressing, use sterile tape.
- If a patient is extremely active or may try to remove the catheter, consider the use of a non-adhesive wrap (such as 3M™ Coban™ Self-Adherent Wrap) to cover and protect peripheral catheters and PICC lines. Apply Coban™ Self-Adherent Wrap without stretching.
- For subclavian and jugular sites, apply the dressing with the patient's head turned away and neck extended as expected in normal movement. This helps prevent contamination of the site from respiratory secretions and stress on the dressing when the patient moves.
- When preparing a site, always clip excess hair including the beard area to ensure good dressing adhesion. Watch for regrowth, which can lift the dressing off the skin.
- For multilumen, pulmonary artery and dialysis catheters, select a specially designed dressing, such as 3M™ Tegaderm™ I.V. Advanced Securement Dressing (1685) or 3M™ Tegaderm™ CHG I.V. Securement Dressing (1657R, 1659R). These dressings provide added securement to prevent dressing lift caused by the weight of the catheter or manipulation of the lumens.
- A sterile alcohol-free barrier film product, such as 3M™ Cavilon™ No Sting Barrier Film, can help protect fragile skin.
- For enhanced securement, tape lumens individually using sterile tape strips.

Risk Reduction for I.V. Therapy

- Before insertion of the catheter and at each dressing change, thoroughly prep the skin with an approved antiseptic solution. Pay careful attention to skin antisepsis around and under the catheter and let dry thoroughly.
- Carefully disinfect ports before access.
- Protect against skin irritation with a sterile alcohol-free barrier film such as 3M™ Cavilon™ No Sting Barrier Film. Compromised skin near the catheter entry site increases the risk of complications.
- Use maximum barrier precautions for central I.V. insertion and sterile technique for site care. Use aseptic technique for peripheral I.V. insertion and dressing application.
- No dressing can substitute for your professional site care.

Precautions:

1. Hemostasis of the catheter site or wound should be achieved before applying the dressing.
2. Do not stretch the dressing during application. Mechanical skin trauma may result if the dressing is applied with tension.
3. Tegaderm™ Transparent Film Dressings should not be re-sterilized by gamma, E-beam or steam methods.

Wound Dressing Tips

- Protection of periwound skin from maceration by exudate is important. A skin protectant or an alcohol-free barrier film product, such as 3M™ Cavilon™ No Sting Barrier Film, can decrease the risk of skin maceration and protect fragile skin. If using a liquid product, allow it to dry completely before dressing application.
- It is normal for exudate to accumulate in many types of wounds, and is more visible with transparent dressings.
- When applying the dressing to the coccyx, extend but do not stretch the skin away from the gluteal fold. Secure the dressing into the gluteal fold first and then smooth outward.

General Risk Reduction

- Transparent dressings allow easy site assessment. Inspect the site frequently for early signs of complications.
- Change the dressing according to your institution's protocol, or when it becomes compromised. Edge lift is not necessarily failure, unless there is a channel from the edge of the dressing to the I.V. entry site or wound.
- For maximum barrier protection, Tegaderm™ Transparent Film Dressing must maintain good adhesion around the total periphery of the I.V. site or wound, and be free of punctures or tears.



The Complete Line of 3M™ Tegaderm™ Transparent Film Dressings for I.V. Securement



3M™ Tegaderm™
I.V. Transparent
Film Dressing
1610



3M™ Tegaderm™
I.V. Transparent
Film Dressing
1633



3M™ Tegaderm™
I.V. Transparent
Film Dressing
1635



3M™ Tegaderm™
I.V. Transparent
Film Dressing
1650



3M™ Tegaderm™
I.V. Transparent
Film Dressing
1655

The Complete Line of 3M™ Tegaderm™ Transparent Film Dressings for I.V. Securement



3M™ Tegaderm™
CHG I.V.
Securement
Dressing
1657R



3M™ Tegaderm™
CHG I.V.
Securement
Dressing
1659R



3M™ Tegaderm™
CHG I.V.
Securement
Dressing
1660R



3M™ Tegaderm™
I.V. Advanced
Securement
Dressing
1683



3M™ Tegaderm™
I.V. Advanced
Securement
Dressing
1685



3M™ Tegaderm™ I.V. Securement
Dressing Designed for the BD
Nexiva™ Closed IV Catheter System
9525HP

References

1. Winter, G.D. "Formation of the scab and the rate of epithelialization of superficial wounds in the skin of the young domestic pig." *Nature*, London 1962, 193: 293–4.
2. Hinman, C.D., Maibach, H.I., Winter, G.D. "Effect of air exposure and occlusion on experimental human skin wounds." *Nature*, London 1962, 200: 377–79.
3. Winter, G.D., Clark, D.W. "The pig as a laboratory animal for the study of wound healing and surgical dressings." *Surgical Dressings and Wound Healing*. Harkiss, K.J. ed., Bradford University Press. 1971, 61–69.
4. Breach, N.M., Davies, D.M., Yiaccoumettis, A. "Study of effects of porcine skin and bovine dermis on the healing of split-skin graft donor sites in humans." *Journal of Plastic and Reconstructive Surgery*, 63:4, 546–549.
5. Miller, T.M. "The healing of partial-thickness skin injuries." *Wound Healing and Wound Infection*, Thomas K. Hunt, ed., Appleton-Century-Crofts, NY, NY, 1980: 81–98.
6. Barnett, A., Berkowitz, R.L., Mills, R., Vistnes, L.M. "Scalp as Skin Graft Donor Site: Rapid Reuse with Synthetic Adhesive Moisture Vapor Permeable Dressings." *Journal of Trauma*, 1983 Feb., 23(2): 148–151.
7. Sebern. "Pressure Ulcer Management in Home Health Care: Efficacy and Cost Effectiveness of Moisture Vapor Permeable Dressing." *Archives of Physical Medicine and Rehabilitation*. Vol. 67, October 1986.
8. Schell, J.A., Stanutz, F., Grimm, J. "Comparison of Moisture Vapor Permeable (MVP) Dressings to Conventional Dressings for Management of Radiation Skin Reactions." *Oncology Nursing Forum*, Vol. 13, No. 1, Jan/Feb 1986.
9. Moshakis, V., Fordyce, M.J., Griffiths, J.D., McKinna, J.A. "Tegaderm™ vs. Gauze Dressing in Breast Surgery." *The British Journal of Clinical Practice*, Vol. 38, No. 4, April 1984.
10. Vazquez, R.M. "Evaluation of Transparent Dressing for Postoperative Wounds." A lecture delivered to the Association for Practitioners in Infection Control, San Diego, CA, May 1983.
11. Rubio, P.A. "Use of semioclusive, transparent film dressings for surgical wound protection: Experience in 3637 cases." *Int Surg* 1991;76:243–254.
12. Thomas, S., Banks, V., Fear, M., Hagelstein, S., Bale, S., Harding, K. "A study to compare two film dressings used as secondary dressings." *Journal of Wound Care* 1997; 6:7, 333–336.
13. HICPAC/CDC Guideline for the Prevention of Intravascular Catheter-Related Infection 2002.
14. Maki, D.G. and Will, L. 1984. "Colonization and infection associated with transparent dressings for central venous, arterial and Hickman catheters—a comparative trial." *Program and Abstracts of the 24th Inter science Conference on Antimicrobial Agents and Chemotherapy*, Washington, D.C.
15. Maki, D.G., Stolz, S.M., Wheeler, S.J., and Mermel, L.A. A prospective, randomized trial of gauze and two polyurethane dressings for site care of pulmonary artery catheters: Implications for catheter management. *Critical Care Medicine*, Vol. 22, No. 11, November 1994.
16. Maki, D.G., and Ringer, M. 1987. "Evaluation of Dressing Regimens for Prevention of Infection With Peripheral Intravenous Catheters." *Journal of the American Medical Association*, Vol. 258, No. 17, November 1987.
17. Data on file. 3M Company. Investigation of Bacterial Growth and Moisture Handling Properties Transparent Adhesive Dressings 1999.
18. Shivan, J.C., McGuire, D., Freedman, S., Sharkazy, E., Bosserman, G., Larson, E., Grouleff, P. "A Comparison of Transparent Adherent and Dry Sterile Gauze Dressings for Long-Term Central Catheters in Patients Undergoing Bone Marrow Transplant." *Oncology Nursing Forum*, Vol. 18, No. 8, pp. 1349–1356, 1991.
19. Lawson, M., Kavanagh, T., McCredie, K., Marts, K., Barbour, N., Chandler, W., "Comparison of Transparent Dressing to Paper Tape Dressing Over Central Venous Catheter Sites." *NITA*, Vol. 9, No. 1, Jan/Feb 1986.
20. Laura, R., Degl'Innocenti, M., Mocali, M., et al. "Comparison of two different time interval protocols for central venous catheter dressing in bone marrow transplant patients: results of a randomized, multicenter study." *Haematologica* 2000; 85: 275–9.
21. Maki, D.G. and Mermel, L. "Transparent Polyurethane Dressings Do Not Increase the Risk of CVC-related BSI: A meta-analysis of Prospective Randomized Trials." *SHEA*, 1997, 7th Annual Scientific Meeting, Vol. 18, No. 5, Part 2, page 51.
22. Kellam, B., Frazee, D., and Kanarek, K. "Central Line Dressing Material and Neonatal Skin Integrity." *Nutrition in Clinical Practice*, April 1988; 3:2, 65–68.

3M™ Tegaderm™ SIMPLE. DEPENDABLE. TRUSTED.
Dressings

For more information, please contact your 3M Skin & Wound Care Representative or call the 3M Health Care Customer Helpline at 1-800-364-3577.

3M

Available in Canada from:
3M Skin & Wound Care
3M Canada Company
P.O. Box 5757
London, Ontario N6A 4T1
Canada
1 800-364-3577
www.3M.com/ca/healthcare

3M Health Care
3M Center, Building 275-4W-02
St. Paul, MN 55144-1000
U.S.A.

OPSITE is a trademark of Smith & Nephew.
Please recycle. Printed in Canada.
© 2012, 3M. All rights reserved.
3M, Cavilon, Coban and Tegaderm are trademarks of 3M.
Used under license in Canada.
1110-03448E