

The right raw materials for advanced wearables

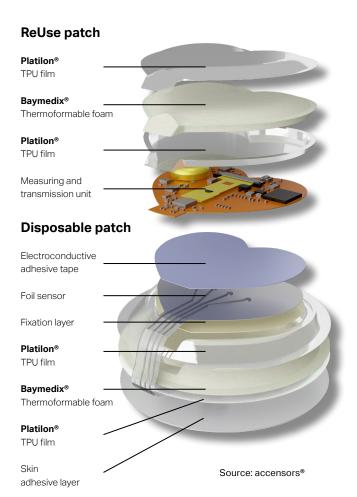
Covestro materials enable innovative ECG/EMG patch design



A wearable smart patch

for patient-friendly monitoring and diagnosis

Basic design concept for wearable smart patches



By providing readings of vital bodily functions, wearable devices like patches help healthcare providers to diagnose patients and monitor their health status. And increasingly, demand is growing for more comfortable, smart wearables that allow patients to be as active and mobile as possible, while still providing accurate readings. Covestro's materials can enable the creation of new designs for these applications.

For instance, Pheal – a designer of user-centric smart patch solutions – recently used Covestro materials in an electrocardiography / electromyography (ECG/EMG) smart patch. This solution is based on an existing smart patch concept that Covestro developed with accensors. It uses Covestro's **Baymedix®** raw materials for adhesives and foams, and its **Platilon®** thermoplastic polyurethane (TPU) films.

The patch helps to identify specific parameters for critical health status changes in cardiovascular-risk patients early on. In this way, it enables healthcare providers to act quickly to prevent a patient's condition from becoming critical.

Key advantages of ECG/EMG patches made with Baymedix® and Platilon®

- Improved placement accuracy
- Enhanced signal quality
- Flexible, stretchable electrode

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¹Please see the "Guidance on Use of Covestro Products in a Medical Application" document. Edition: April 2023