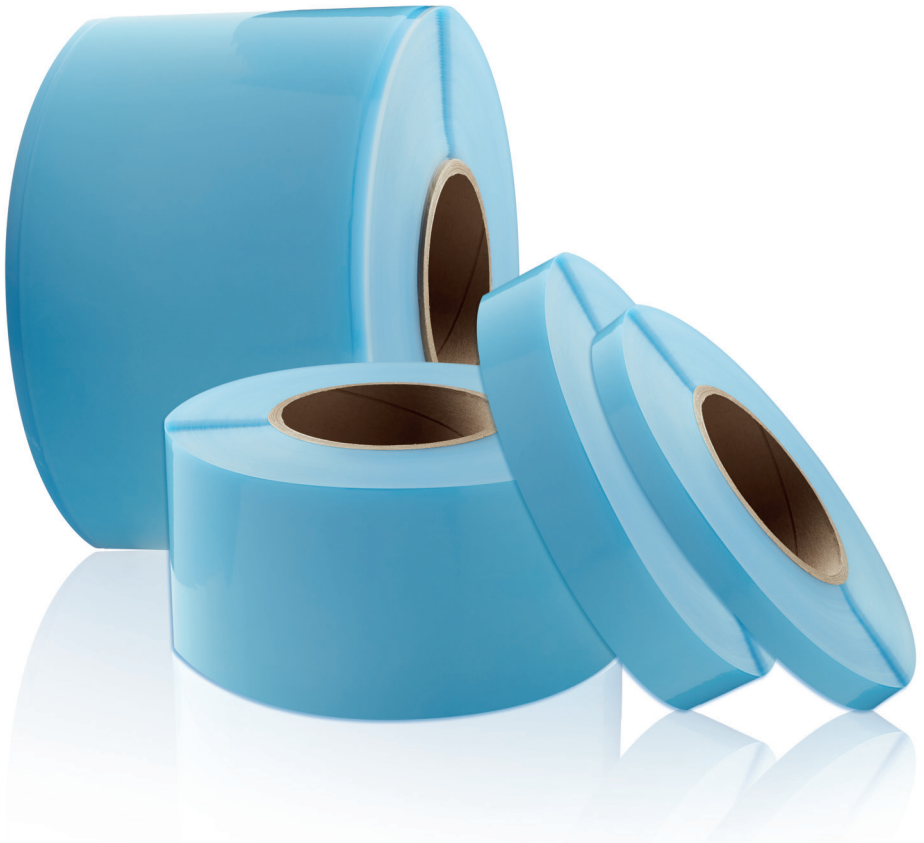




# HYDROGEL CATALOGUE



2024 - 2025

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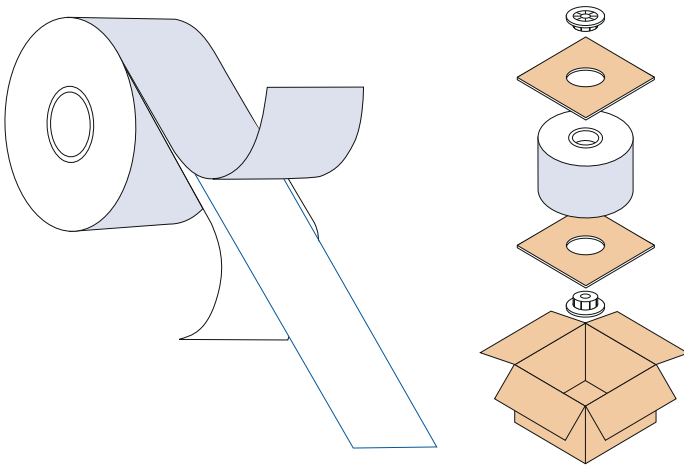


# Quality Manufacturing

Axelgaard Manufacturing's mission is to deliver high quality and consistent hydrogels. Our AmGel® brand patented hydrogels are used in products worldwide for varied applications.

Ground-breaking research and development, advanced industry expertise, and state-of-the-art equipment make us one of the most sophisticated hydrogel manufacturers in the world.

Axelgaard is compliant with Good Manufacturing Practices (GMP) and ISO 13485:2016 MDSAP.



**We invite you to learn more, connect, and collaborate:**  
[www.axelgaard.com](http://www.axelgaard.com) • [support@axelgaard.com](mailto:support@axelgaard.com)

**Complete TDS documentation is available online:**  
[www.axelgaard.com/Documents](http://www.axelgaard.com/Documents)

Our products are patent protected.

**For more information, see:**  
[www.axelgaard.com/PatentList](http://www.axelgaard.com/PatentList)

# AmGel® Hydrogels

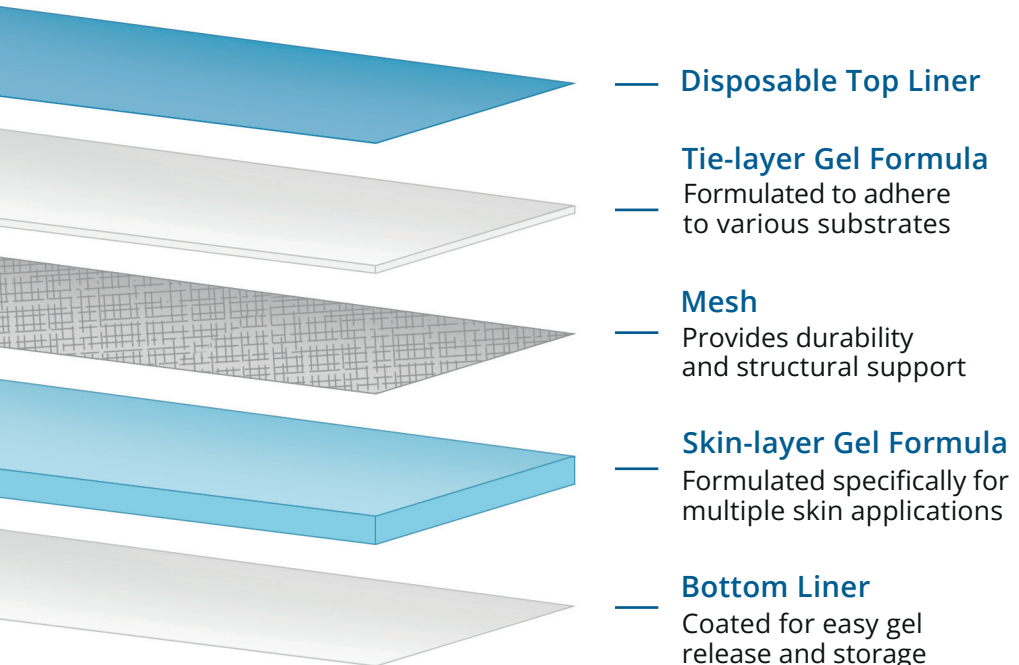
Axelgaard manufactures a full line of AmGel® hydrogels in bulk rolls for a variety of applications such as stimulation, sensing, defibrillation, surgical grounding pads, iontophoretic buffered return electrodes, skin care, wound care, and fixation.

Custom hydrogel formulations both with and without infused ingredients are also available.

## Hydrogel Technology

Our patented multi-layer adhesive hydrogel formulations eliminate the performance problems associated with single-layer hydrogels. This multi-layer approach ensures maximum durability, longevity, and performance.

The colors and thicknesses shown below are for illustrative purposes only to depict the layers present in our hydrogels.



# Services and Support

Axelgaard offers services and support tailored to the customer's needs.

- Engineering and R&D teams with the experience and technical ability to make your specialty product a reality.
- Dispense-And-Cure standard and custom formulated hydrogel for wearable biomedical devices.
- Slitting capabilities to suit customers' specific requirements. The minimum slit width is 0.75" (2 cm).
- Standard and custom formulated hydrogel pads and tapes for medical products, skin fasteners, cosmetic skincare products, breaching, and more.
- Hydrogel formulations can be customized both with and without infused ingredients.



# AG500 Series Hydrogel

## Dermal Fastener - High Adhesive Tack

Designed and formulated for adhering a product repeatedly to the skin. AG500 hydrogels provide a “quick grab” and excellent restick capabilities.

PART #	GEL THICKNESS	USABLE WIDTH	ROLL LENGTH
AG544	44 mils (1.1 mm)	9" (22.9 cm)	250' (76 m)



## Features

**Uses:** Fastening

**Top Release Liner:** Width - 9.75" (24.8 cm) / 2 mil (0.05 mm) LDPE

**Bottom Release Liner:** Width - 10" (25.4 cm) / 5 mil (0.13 mm) PET

**Compatible Substrate:** Variety of substrates

**Volume Resistivity [ $\Omega$ .cm]:** Not Applicable

**Process Shelf Life:** Non-Slit 1 / Year Slit 6 Months

# AG600 Series Hydrogel

## Sensing - Medium Adhesive Tack

Designed and formulated for use in electrocardiogram (ECG/EKG), electromyogram (EMG), defibrillation, and wireless monitoring applications. AG600 hydrogels have excellent re-adhesion capabilities for skin interface.

PART #	GEL THICKNESS	USABLE WIDTH	ROLL LENGTH
AG625	25 mils (0.6 mm)	9" (22.9 cm)	300' (91 m)
AG635	35 mils (0.9 mm)	9" (22.9 cm)	300' (91 m)
AG640	40 mils (1.0 mm)	9" (22.9 cm)	250' (76 m)



## Features

**Uses:** Sensing, Defibrillation, Stimulation

**Top Release Liner:** Width - 9.75" (24.8 cm) / 2 mil (0.05 mm) LDPE

**Bottom Release Liner:** Width - 10" (25.4 cm) / 5 mil (0.13 mm) PET

**Compatible Substrate:** Silver inks, conductive carbon films

**Volume Resistivity [ $\Omega$ .cm]:** AG625 - 400\* ( $\leq 600$ )  
AG635 - 350\* ( $\leq 500$ )  
AG640 - 340\* ( $\leq 450$ )

**Process Shelf Life:** Non-Slit 1 Year / Slit 6 Months

**Not compatible with foils or metals.**

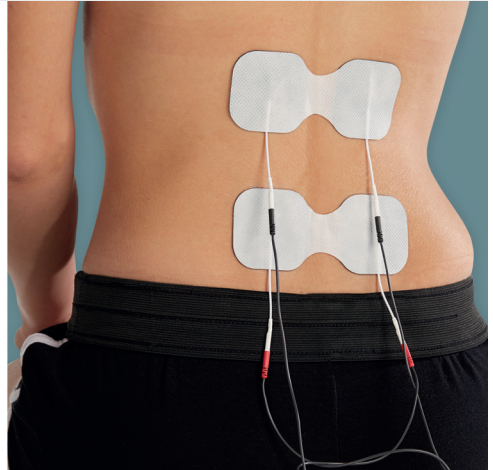
\* Typical values for Volume Resistivity

# AG700 Series Hydrogel

## Stimulation - Medium Adhesive Tack

Designed and formulated for TENS and muscle stimulation applications. AG700 hydrogels offer optimal and durable bonding to the substrate with multiple applications to skin.

PART #	GEL THICKNESS	USABLE WIDTH	ROLL LENGTH
AG735	35 mils (0.9 mm)	9" (22.9 cm)	300' (91 m)



## Features

**Uses:** Stimulation

**Top Release Liner:** Width - 9.75" (24.8 cm) / 2 mil (0.05 mm) LDPE

**Bottom Release Liner:** Width - 10" (25.4 cm) / 5 mil (0.13 mm) PET

**Compatible Substrate:** Silver inks, conductive carbon films, conductive fabrics

**Volume Resistivity [ $\Omega$ .cm]:** 1100\* ( $\leq 1500$ )

**Process Shelf Life:** Non-Slit 18 months / Slit 6 Months

**Designed for use with conductive carbon film.**

*\* Typical values for Volume Resistivity*

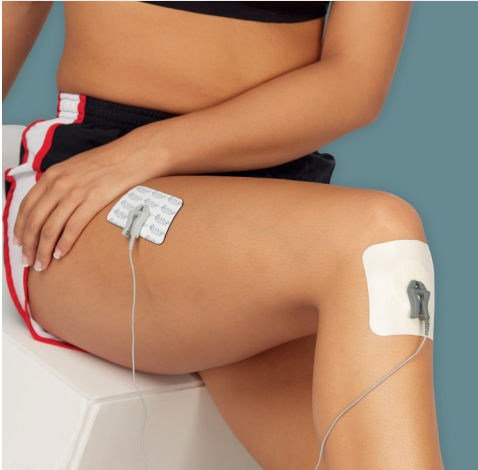


# AG800 Series Hydrogel

## Buffer - Medium Adhesive Tack

Designed specifically for iontophoresis buffered return electrodes. AG800 hydrogels offer a stable environment to prevent skin burns and irritation.

PART #	GEL THICKNESS	USABLE WIDTH	ROLL LENGTH
AG835	35 mils (0.9 mm)	9" (22.9 cm)	300' (91 m)



## Features

**Uses:** Direct current / Iontophoresis

**Top Release Liner:** Width - 9.75" (24.8 cm) / 2 mil (0.05 mm) LDPE

**Bottom Release Liner:** Width - 10" (25.4 cm) / 5 mil (0.13 mm) PET

**Compatible Substrate:** Carbon films

**Volume Resistivity [ $\Omega$ .cm]:** 24,000\* (15,000-30,000)

**Process Shelf Life:** Non-Slit 1 Year / Slit 6 Months

\* Typical values for Volume Resistivity

# AG900 Series Hydrogel

## Grounding - Medium Adhesive Tack

Specifically designed for use in high frequency grounding pads. AG900 hydrogels feature excellent cohesion, adhesion, and offer corrosion resistance to aluminum.

PART #	GEL THICKNESS	USABLE WIDTH	ROLL LENGTH
AG936	36 mils (0.9 mm)	9" (22.9 cm)	300' (91 m)



## Features

**Uses:** Surgical grounding pads

**Top Release Liner:** Width - 9.75" (24.8 cm) / 2 mil (0.05 mm) LDPE

**Bottom Release Liner:** Width - 10" (25.4 cm) / 5 mil (0.13 mm) PET

**Compatible Substrate:** Aluminum foil

**Volume Resistivity [ $\Omega$ .cm]:** 4200\* ( $\leq 7000$ )

**Process Shelf Life:** Non-Slit 1 Year / Slit 6 Months

\* Typical values for Volume Resistivity

# AG2500 Series Hydrogel

## Multi-Use - High Adhesive Tack

Premium hydrogels designed and formulated for a variety of uses, including sensing, stimulation, and fastener applications. These soft and elastic hydrogels exhibit excellent restick.

PART #	GEL THICKNESS	USABLE WIDTH	ROLL LENGTH
AG2530	30 mils (0.8 mm)	9" (22.9 cm)	300' (91 m)
AG2540	40 mils (0.9 mm)	9" (22.9 cm)	250' (76 m)
AG2550	50 mils (1.3 mm)	9" (22.9 cm)	250' (76 m)



## Features

**Uses:** Sensing, Stimulation, Fastening

**Top Release Liner:** Width - 9.75" (24.8 cm) / 2 mil (0.05 mm) LDPE

**Bottom Release Liner:** Width - 10" (25.4 cm) / 5 mil (0.13 mm) PET

**Compatible Substrate:** Silver inks, conductive carbon films

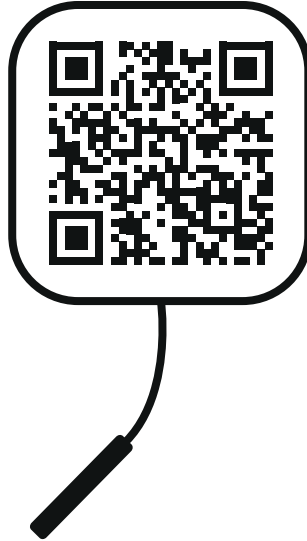
**Volume Resistivity [ $\Omega$ .cm]:** AG2530 - 625\* ( $\leq 1000$ )  
AG2540 - 600\* ( $\leq 1000$ )  
AG2550 - 550\* ( $\leq 1000$ )

**Process Shelf Life:** Non-Slit 18 Months / Slit 6 Months

**Not compatible with foils or metals.**

\* Typical values for Volume Resistivity

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