



Liveo<sup>™</sup> Silicone Skin Adhesives

Dymax 2000-MW series UV-curing adhesives

Delrin<sup>®</sup> & Celanese™ plastic housing solutions Spotlight Wearables



Medical wearables are advanced devices designed to monitor and track various health metrics in real-time. These devices can include smartwatches, fitness trackers, and specialized medical sensors that measure vital signs such as heart rate, blood pressure, glucose levels, and more. They are often equipped with connectivity features that allow users to sync data with smartphones or healthcare systems, enabling better health management and timely interventions. The market for medical wearables is experiencing significant growth worldwide, driven by increasing health awareness, technological advancements, and a rising demand for remote patient monitoring solutions.

In fact, the global wearable medical devices market size was valued at USD 81.15 billion in 2023. The market is projected to grow from USD 91.21 billion in 2024 to USD 324.73 billion by 2032, exhibiting a CAGR of 17.2% during the forecast period.

<sup>1</sup> Jeff Loucks, Ducnan Steward, Ariane Bucaille, Gillian Crossan, Wearable technology in health care: getting better all the time, in Technology, Medica and Telecommunications Predictions 2022 for Deloitte Insights, 2022

# Wearable medical devices are built of several unique layers

- 1. Delrin<sup>®</sup> Moving Parts Solutions Celanese<sup>™</sup> Crastin<sup>®</sup> Housing Solutions
- 2. Dymax<sup>®</sup> Electronics Encapsulation
  - B. Dymax<sup>®</sup> Needle-to-Hub Bonding
- 4. Dymax<sup>®</sup> Edgebond

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- 5. Dymax<sup>®</sup> Battery Reinforcement
  - Dymax<sup>®</sup> Wire and Flex Tacking
  - Dymax<sup>®</sup> Assembly Bonding
    - DuPont<sup>™</sup> Liveo<sup>™</sup> Silicone Skin-Adhesives



## Dymax 2000-MW Series UV-curing Adhesives



Dymax 2000-series adhesives are uniquely designed for assembly of wearable medical devices. Formulated without skin-irritants, the series provides strong bonds and dependable performance against moisture and thermal shock.

Material ID	Unique material features		Recommended substrates
2022-MW	– 750 cP – D60 (ShoreA) – LED-optimized for 365 nm	<ul><li>low water absorption</li><li>ISO 10993-5/10</li><li>IBOA &amp; TPO free</li></ul>	SS, Aluminum, Glass, SAN, PU, PI, PETG, PC, ABS
2101-MW-UR	– 5500 cP – D80 (ShoreA) – LED-optimized for 405 nm	<ul> <li>Ultra-red fluorescence</li> <li>ISO 10993-5/10</li> <li>IBOA &amp; TPO free</li> </ul>	ABS, PC, PCTG, PETG, PVC, TPU
2103-MW-UR	– 5500 cP – D70 (ShoreA) – LED-optimized for 405 nm	<ul><li>Ultra-red fluorescence</li><li>ISO 10993-5/10</li><li>IBOA &amp; TPO free</li></ul>	PC, ABS, PVC, PEBA, SS
1901-M	<ul> <li>- 3000 cP</li> <li>- A67 (ShoreA)</li> <li>- for sealing, conformal coating or circuit boards &amp; components</li> </ul>	encapsulation of electronic	CAP, PS, TPU, PCB (flexible & rigid)

# DuPont<sup>™</sup> Liveo<sup>™</sup> Silicone Skin Adhesives

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Material ID	Unique material features	Application areas
Liveo™ MG 7-9900	<ul> <li>soft-skin-adhesive</li> <li>two-part (A&amp;B)</li> <li>1,9 N/2,5cm (PC)</li> <li>5000 mPas (A&amp;B)</li> <li>- 140 mm/10</li> <li>(Penetration after cure)</li> </ul>	medium adhesion to the skin with gentle removal, OTC bandages, scar therapy gels, advanced wound care dressings
Liveo™ MG 7-9960*	<ul> <li>soft-skin-adhesive</li> <li>two-part (A&amp;B)</li> <li>2,8 N/2,5cm (PC)</li> <li>4400 mPas (A&amp;B)</li> <li>- 145 mm/10 (Penetration after cure)</li> </ul>	medium to high adhesion to the skin, specifically designed for wearable medical device fixation
Liveo™ MG-2401	– pressure-sensitive-adhesive – one-part solvent-based (HMDS) – 17,2 N/2,5cm (PC) – 90 mPas	high & durable adhesion to the skin, specifically designed medical devices such as stoma- patches, surgical dressings/pads, external prosthetic devices and patient monitoring

\* USP Class V & VI compliant ISO-10993 5/10 compliant limited release

## Delrin<sup>®</sup> POM-Homo Celanese<sup>™</sup> Crastin<sup>®</sup> PBT





٢	Material	Unique material features	Application areas
	Delrin <sup>®</sup> SC698 Delrin <sup>®</sup> SC698 Delrin <sup>®</sup> RASC698	POM-Homopolymer, self-lubricating, fatique and impact resistance, dimensional stability. Delrin® RASC is produced with 100% renewable attributed content.	Gear wheels for insulin pumps, small parts in motion
	Crastin <sup>®</sup> SC164	Unreinforced PBT, good chemical resistance, excellent colourability	Housing components for medical devices and wearables

Biocompatibility, ISO 10993-5 and 10993-11USP VI

• Good Manufacturing Practice (GMP)

• Sterilisable

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