

**Healthcare Solutions** 

# Innovative silicone adhesives for your medical device

#### Adhesives

Pressure sensitive adhesives (PSAs) and soft skin adhesives (SSAs) can be used for wearable monitoring devices, wound care products, medical device attachments, external prosthetic devices and specialty cosmetic applications.

#### **Innovation Meets Expertise**

You want to explore new directions and create the next generation of medical device technology. You have a powerful ally with DuPont. When we are part of your team, you're backed by our expertise and our culture of discovery and innovation, nurtured by six decades of proven performance. You'll find a depth of knowledge not just in silicone chemistry, but in the medical device industry and process technology.

	Benefits	Product Description	Typical Applications	Processing Methods		
PSA						
Dow Corning <sup>™</sup> MG Series Pressure Sensitive Adhesives for Medical Devices	<ul> <li>Biocompatibility (non-irritating and non-sensitizing)</li> <li>High adhesion and conformity to skin</li> <li>Adhesion for extended wear time</li> <li>High gas and moisture permeability</li> </ul>	One-part, polycondensed polydimethylsiloxane/silicate resin adhesives Volatile solvent-based silicone adhesives	<ul> <li>Non-sensitizing adherence of medical devices/ appliances (colostomy, ileostomy, surgical dressings/pads, external prosthetic devices</li> </ul>	Uses conventional tape coating equipment • Transfer coating • Brushing process		
	<ul> <li>Available in a range of tack options, solvent types and solid contents to help meet application needs and processing constraints</li> </ul>	One-part, polycondensed polydimethylsiloxane/ silicate resin adhesive Hot melt silicone adhesive	and patient monitoring)	Can be applied using conventional hot melt coating equipment		
Elastomer						
Dow Corning <sup>™</sup> Soft Filling Elastomer	<ul> <li>Transparent</li> <li>Low viscosity</li> </ul>	Two-part (1:1 by weight), platinum-catalyzed, soft fillerless elastomer	<ul> <li>Filling material for external foam prostheses and pressure cushions</li> </ul>			
SSA						
Dow Corning <sup>™</sup> MG Series Soft Skin Adhesives	• Transparent • Low viscosity	Two-part (1:1 by weight), platinum-catalyzed, soft fillerless elastomeric adhesive	<ul> <li>Non-sensitizing, gentle adhesion to skin (wound care and scar therapies)</li> </ul>	Knife over roll coating process is recommended		

• Specification writers: These values are not intended for use in preparing specifications. Please contact a DuPont representative prior to writing specifications on these products.

· Adhesion promoters are available. Please contact your DuPont representative for details.



#### **Biocompatibility Testing**

Products	Cytotoxicity	Mutagenicity/Genotoxicity	Skin Irritation	Skin Sensitization	Pyrogenicity (USP)	System Toxicity	FDA Drug Master File	Solvent Type	Solid Content (%)	Viscosity at 25°C (cP)	Melt Viscosity at 185°C (cP)	Nominal Tack Value	Peel Adhesion (g/cm)	Shear (kg)
Dow Corning <sup>™</sup> MG-2401 Silicone Pressure Sensitive Adhesive¹	•		•	•				Hexa- methyldi- siloxane	32	90	Not Applicable	Medium	700	21
Dow Corning <sup>™</sup> MG-2402 Silicone Pressure Sensitive Adhesive¹			•	•				Ethyl Acetate	64	2500	Not Applicable	Medium	700	21
Dow Corning <sup>™</sup> MG-2502 Silicone Pressure Sensitive Adhesive¹	•		•	•				Ethyl Acetate	59	2000	Not Applicable	High	670	16
Dow Corning <sup>™</sup> MG-2410 Silicone Pressure Sensitive Adhesive¹	•		•	•				Not Applicable	100	Not Applicable	30300	Very High	590	9
								Viscosity Part A (mPa-s)	Viscosity Part B (mPa·s)	Penetration After Cure (mm/10)	Adhesion (N/2.5cm)	Release (N/2.5cm)		
Dow Corning <sup>™</sup> 7-9600 Soft Filling Elastomer	•	•	•	•	•	•	•	470	470	245-275	0.1	Not Applicable		
Dow Corning <sup>™</sup> MG7-9700 Soft Skin Adhesive	•		•	•				500	320	90	0.6	0.11		
Dow Corning <sup>™</sup> MG7-9800 Soft Skin Adhesive	•		•	•			•	500	320	90	0.6	0.11		
Dow Corning <sup>™</sup> MG7-9850 Soft Skin Adhesive							•	2900	2900	135	1.1	0.03		
Dow Corning <sup>™</sup> MG7-9900 Soft Skin Adhesive							•	5100	5100	140	1.9	0.05		

<sup>1</sup> Based on test results on adhesive solids

A Based on biocompatibility test data from analogous materials



### **OUPONT**

## To learn more about DuPont's healthcare solutions visit: www.dupont.com/healthcare.html

For country-level information, visit: www.dupont.com/corporate-functions/ our-company/global-locations.html

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