



SILICONE GELS

FOR ADVANCED
WOUND AND
SCAR CARE



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Innovative Materials with both the Patient & Manufacturer in Mind

The health care industry is faced with a growing challenge to develop products that offer improved properties for patient care and adherence to the highest clinical standards, while at the same time being more cost effective to produce.

As a leading provider of silicones to the medical field, Momentive Performance Materials has a long history of providing innovative material solutions that help solve the toughest manufacturing challenges. Momentive's silicone gels offer high, yet atraumatic, adhesion to skin with biocompatibility, as well as opportunities for improved production efficiencies, making them excellent candidates to consider for advanced wound care applications.



Silicones that Enable Advanced Wound & Scar Care Product Designs

Momentive's Silopren* silicone gel product family is inherently water vapor and gas permeable, and thus able to promote wound healing through moisture transport.

The Silopren silicone gel family can also provide wound care products with secure skin adhesion, as well as allow atraumatic removal, which is especially critical for fragile skin, such as that of many elderly patients.

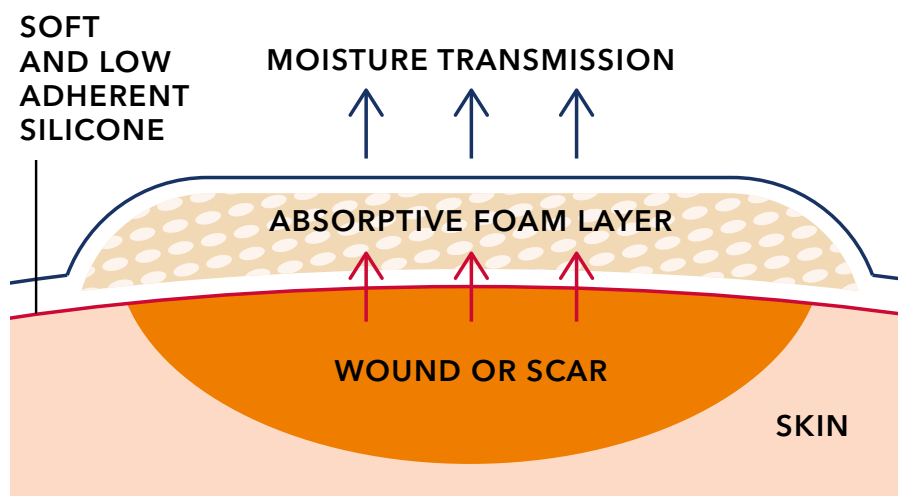
Silopren silicone gels also offer excellent benefits to products that are repeatedly applied to and removed from patients, as wound dressings utilizing Silopren silicone gel are able to be repositioned. Additionally, Silopren silicone gels offer high tack, which can allow the manufacture of wound care dressings with lower silicone coat weights, and in turn enable production efficiencies.

The Silopren silicone gel product portfolio of candidates for the advanced wound care applications consists of kit matched, addition-cure, two-component (1:1 mix ratio) transparent silicone rubber gels that are formulated without solvents and compatible with most coating processes.

MOMENTIVES
WOUND CARE
SILICONES ARE
HYDROPHOBIC
AND DO NOT
SUPPORT
MICROBIAL
GROWTH

As a component to a wound care product, the silicone contact layer forms a gentle bond or seal between dressing and skin around the wound, offering an immediate and stable adhesion profile, unlike typical acrylic adhesives that progressively become more adhesive with increased duration of application, which can result in damage to the wound bed and skin upon removal and/or repositioning.

Acrylics only adhere to top layer of skin- leaving incomplete seal-wound exudate can leak/ migrate to surrounding healthy tissue. Silicones create multiple adhesion points on skin "tack" creating seal to prevent exudate migrating to healthy tissue.





Product Name	Product Description	Key Features and Typical Benefits	Processing
Silopren* Gel 4900	<p>Silopren Gel 4900 is a kit matched low viscosity, solventless, clear, two-component silicone gel formulation. After mixing the A and B component at a ratio of 1:1 the material cures through an addition reaction to a soft self-adhesive silicone gel which is generally used for healthcare device applications or applications where adhesion to skin is needed, such as scar care & wound care products.</p>	<ul style="list-style-type: none"> • Clear appearance • Secure adhesion to skin • Atraumatic release • Repositioning Capability • Applicable clinical and biocompatibility testing credentials • Solvent-free formulation. 100% silicone solids • Compatibility with a wide array of substrates, including polyurethane, open knit and perforated films 	<p>Combine Part A: Part B in a 1:1 ratio prior to use. Airless mixing, metering, or dispensing equipment is recommended for production operations. If mixing by hand, it is important to minimize air entrapment. Remove air entrapped during mixing by common vacuum de-aeration procedures. Slowly apply full vacuum to a suitable container of at least four times the volume of the material being de-aired. Hold vacuum until bulk de-aeration is complete.</p>
Silopren Gel 4950	<p>Silopren Gel 4950 is a kit matched low viscosity, solventless, clear, two-component silicone gel formulation. After mixing the A and B component at a ratio of 1:1 the material cures through an addition reaction to a soft self-adhesive silicone gel which is generally used for healthcare device applications or applications where adhesion to skin is needed, such as wound care applications and scar care products.</p>	<ul style="list-style-type: none"> • Clear appearance • Secure adhesion to skin • Atraumatic release • Repositioning Capability • Applicable clinical and biocompatibility testing credentials • Solvent-free formulation. 100% silicone solids • Compatibility with a wide array of substrates, including polyurethane, open knit and perforated films 	<p>Combine Part A : Part B in a 1:1 ratio prior to use. Airless mixing, metering, or dispensing equipment is recommended for production operations. If mixing by hand, it is important to minimize air entrapment. Remove air entrapped during mixing by common vacuum de-aeration procedures. Slowly apply full vacuum to a suitable container of at least four times the volume of the material being de-aired. Hold vacuum until bulk de-aeration is complete.</p>



Curing	Viscosity	Working time at 23 °C ⁽¹⁾	Penetration ⁽²⁾	Peel Force on Stainless Steel ⁽³⁾	Probe Tack ⁽⁴⁾	Biocompatibility & Clinical Testing Certifications
At room temperature, curing begins after mixing. Additional heating accelerates the cure speed. Proper cure of Silopren Gel 4900 requires a clean, dry surface which has been properly prepared. Certain materials will cause cure inhibition, including: sulfur cured organic rubbers, latex, chlorinated rubbers, some RTV silicones and untreated residues of some curing agents.	A-Component 950 mPas at 20 °C B-Component 650 mPas at 20 °C	180 min	90 mm /10	NA	NA	Cytotoxicity <ul style="list-style-type: none"> Agar Diffusion (ISO 10993-5) MEM Elution (ISO 10993-5) USP Class VI & ISO 10993 (6, 10 & 11) <ul style="list-style-type: none"> Systemic toxicity Intracutaneous toxicity Implantation (14 days) Clinical Testing <ul style="list-style-type: none"> HRIPT (Human Repeated Insult Patch Test) CIT (Cumulative Irritation Test - 14 days)
At room temperature, curing begins after mixing. Additional heating accelerates the cure speed. Proper cure of Silopren Gel 4950 requires a clean, dry surface, which has been properly prepared. Certain materials will cause cure inhibition, including: sulfur cured organic rubbers, latex, chlorinated rubbers, some RTV silicones and untreated residues of some curing agents.	A-Component 10,000 mPas at 20 °C B-Component 9,000 mPas at 20 °C	180 min	135 mm /10	1.7 N/25 mm	5 - 6 mJ /cm ³	Cytotoxicity <ul style="list-style-type: none"> Agar Diffusion (ISO 10993-5) MEM Elution (ISO 10993-5) USP Class VI & ISO 10993 (6, 10 & 11) <ul style="list-style-type: none"> Systemic toxicity Intracutaneous toxicity Implantation (14 days) Clinical Testing <ul style="list-style-type: none"> HRIPT (Human Repeated Insult Patch Test) CIT (Cumulative Irritation Test - 14 days)

(1) Each 10 degree increase in ambient temperature cuts working time approximately in half.
 (2) Cured for 60 minutes at 110 °C; hollow cone; 62.5 gr, 60 sec.
 (3) Internal Test method: 180° Peel-off Test; 180 grit stainless steel substrate.
 (4) Internal Test method: Probe tack test, layer thickness approx. 200 micrometers, stainless steel probe.
 Note: Probe Tack values are dependent on layer thickness
 Typical properties are average data and are not to be used as or to develop specifications.



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