



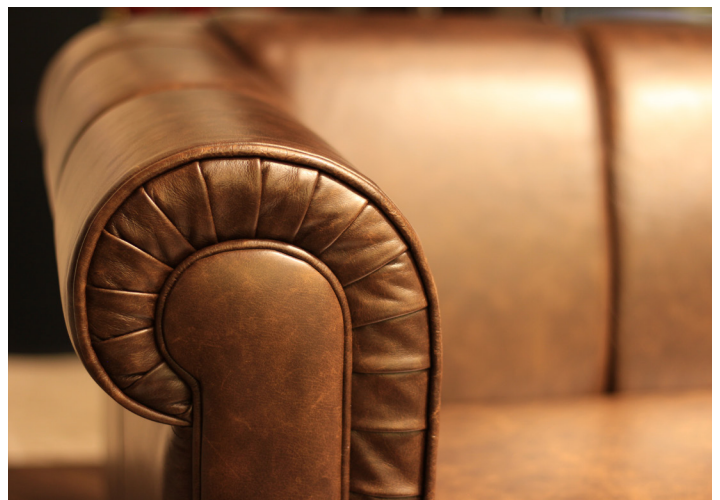
LEATHER SOLUTIONS

## Silicones from Dow for leather treatment

Leather products represent an important segment within the automotive interiors, apparel, and home fashions marketplaces. Leather is fashionable. It looks good and feels good. It is comfortable, easy to care for and practical enough for daily use.

Silicone leather finishes give natural leather a luxurious hand feel surface finish, a natural, authentic matte look, providing important water repellency, abrasion resistance and anti-soiling properties. Furthermore, silicones make synthetic leather softer and more breathable.

This brochure provides information on Dow silicone leather products available around the world. This global product family represents a range of successful, high-performance silicone products useful in a wide range of leather finishing applications. However, additional Dow products may also be available in your area. Contact your local Dow representative for more information.



## Natural leather - Product descriptions

Product	Features / benefits
<b>Top coatings</b>	
DOWSIL™ Q2-3238 Dispersable Silicone Additive	High concentrated non aqueous dispersion of high-molecular-weight silicone; used particularly as an additive in automotive leather finishes, providing wet rub resistance and feel modification combined with a matte appearance; compatible with polyurethane and acrylic binders; suitable for solvent and aqueous-based binders.
DOWSIL™ 2-9147 LF Dispersion	High molecular weight silicone dispersion in solvent diethylene glycol monoethyl ether, to improve ease of handling and formulating; used particularly as an additive in automotive leather finishes, providing wet rub resistance and feel modification combined with a matte appearance; compatible with polyurethane and acrylic finishes; suitable for aqueous and solvent-based binders.
DOWSIL™ IE-9148 LF Dispersion	BTX free, high molecular weight silicone dispersion in solvent diethylene glycol to improve ease of handling and formulating; used particularly as an additive in automotive leather finishes, providing wet rub resistance and feel modification combined with a matte appearance; compatible with polyurethane and acrylic finishes; suitable for aqueous and co-solvent based binder.
DOWSIL™ 5-7210 LF Emulsion	BTX free, high molecular weight polydimethylsiloxane aqueous emulsion offers improved wet and dry rub resistance to leather top coating and improves the softness of the leather; suitable for aqueous-based binders.
DOWSIL™ 5-7310 LF Emulsion	High molecular weight silicone aqueous dispersion; used particularly as an additive in automotive leather finishes, providing wet rub resistance and feel modification combined with a matte appearance; compatible with polyurethane and acrylic binders; suitable for aqueous-based binders.
DOWSIL™ 5-7222 LF Emulsion	Extremely high molecular weight polydimethylsiloxane macroemulsion for leather finishes; offers a silky smooth finish, abrasion and wet rub resistance. Suitable for aqueous based binders.
DOWSIL™ 5-7254 LF Emulsion	Aminofunctional silicone microemulsion for anti-squeak performance of leather top coatings. Suitable for aqueous based binder.
DOWSIL™ 23 N Additive	Silicone elastomer powder providing a rubbery smooth matte finish, mar and abrasion resistance to top coatings; suitable primarily for solvent based binders but also for aqueous based binders after predilution in co-solvent.
DOWSIL™ 33 Additive	Silicone elastomer powder aqueous suspension providing a rubbery smooth, medium matte finish, mar and abrasion resistance to top coatings; suitable for water-based binders
DOWSIL™ IE-3301 Elastomer Suspension	Silicone elastomer powder aqueous suspension providing a rubbery smooth, high matte finish, to top coatings; suitable for water-based binders.
XIAMETER™ MEM-8818 Emulsion	Aminofunctional silicone emulsion for touch and softness modification
DOWSIL™ 5-7031 LF Emulsion	Aminofunctional silicone macroemulsion for touch modification combined with moderate enhancement of wet rub resistance
DOWSIL™ HV 496 Emulsion	High-molecular-weight anionic silicone emulsion; offers some abrasion resistance, gloss finish and medium hydrophobicity to leather top coatings.
XIAMETER™ OFX-0531 Fluid	Aminomethoxy-functional polydimethylsiloxane in solvent; premium softener for leather treatments; can be chemically reacted into polymer systems, minimizing or eliminating the problem of silicone transfer or oiling and enhancing durability; improves abrasion resistance, durable water repellency, modify surface properties. Suitable for solvent based binders.
XIAMETER™ OFX-0536 Fluid	Aminomethoxy-functional polydimethylsiloxane; premium softener for leather treatments; can be chemically reacted into polymer systems, minimizing or eliminating the problem of silicone transfer or oiling and enhancing durability; improves abrasion resistance, durable water repellency, modify surface properties. BTX free, suitable for solvent based binders.
<b>Post finishing</b>	
DOWSIL™ FBL-0477 Formulated Blend	Reactive silicone resin in solvent; used as a topcoat; offers excellent hydrophobicity, supple and breathable leather.
XIAMETER™ MEM-0347G Emulsion	Slightly anionic emulsion of low molecular weight silanol polymer; can be used as release agent between coated finished leather to minimize adhesion during storage. Dilutable in water.
<b>Top coating formulation aid</b>	
XIAMETER™ OFX-0190 Fluid	Formulation additive for leveling and wetting of aqueous based coatings
XIAMETER™ OFX-5211 Fluid	Formulation additive for leveling and wetting to improve surface appearance finishes of aqueous based binders.

Products indicated as "BTX-free" have been manufactured without intentionally adding benzene, toluene, or 3-xylene isomer components.

## Natural leather - Product descriptions continued

Product	Features / benefits
Wet end - fat liquor	
DOWSIL™ BY 16-880 <sup>(1)</sup>	Carboxyl-functional silicone for wet-end application to offer hydrophobicity
DOWSIL™ 5-7203 WE Emulsion	Nonionic microemulsion of organofunctional polymer; formulation additive for fat liquor, impart hydrophobization and lightweight softness.

## Natural leather - Product selector guide

Product	Benefit									Binder system	
	Abrasion resistance	Wet rub resistance	Matting agent	BTX free	Feel modifier	Anti-squeak	Water repellency	Release	Leveling	Aqueous	Solvent
Top coatings											
DOWSIL™ Q2-3238 Dispersible Silicone Additive	X	X			X		X			X	X
DOWSIL™ 2-9147 LF Dispersion	X	X			X		X			X	X
DOWSIL™ IE-9148 LF Dispersion	X	X		X	X		X			X	X
DOWSIL™ 5-7210 LF Emulsion	X	X	X	X	X					X	
DOWSIL™ 5-7310 LF Emulsion	X	X			X					X	
DOWSIL™ 5-7222 LF Emulsion	X	X		X	X					X	
DOWSIL™ 5-7254 LF Emulsion						X				X	
DOWSIL™ 23 N Additive		X	X	X	X					X	X
DOWSIL™ 33 Additive		X	X	X	X					X	
DOWSIL™ IE-3301 Elastomer suspension		X	X	X	X					X	
DOWSIL™ 5-7031 LF Emulsion		X		X	X		X			X	
XIAMETER™ MEM-8818 Emulsion				X	X					X	
DOWSIL™ HV 496 Emulsion		X		X			X			X	
XIAMETER™ OFX-0531 Fluid	X				X		X				X
XIAMETER™ OFX-0536 Fluid	X				X		X				X
Post finishing											
DOWSIL™ FBL-0477 Formulated Blend					X		X				X
XIAMETER™ MEM-0347G Emulsion				X				X		X	
Top coating formulation aid											
XIAMETER™ OFX-0190 Fluid				X					X	X	
XIAMETER™ OFX-5211 Fluid				X					X	X	
Wet end-fat liquor											
DOWSIL™ BY 16-880 <sup>(1)</sup>				X			X			X	
DOWSIL™ 5-7203 WE Emulsion				X	X		X			X	

<sup>(1)</sup> Available only in Europe and Asia  
X - Benefit that can be leveraged to

## Synthetic leather - Product descriptions

Product	Features / benefits
<b>Polyurethane modification</b>	
DOWSIL™ BY 16-201	100% active Silicone polyether with good compatibility with organic resins, improves levelling, wear resistance and softness. Use in copolymerization with polyurethane and NCO. Suitable for water-based systems. Improve polyurethane ester hydrolysis and breathability. BTX free.
DOWSIL™ SF 8427 Fluid	100% active Silicone polyether with good compatibility with organic resins, improves levelling, anti-sticking, wear resistance and softness. Suitable for in copolymerization with polyurethane and NCO. Suitable for water-based systems. BTX free.
DOWSIL™ 1248 Fluid	100% active hydroxy functional silicone to improve flexibility, slip, hydrophobicity, and levelling. Suitable for copolymerization with polyurethane and NCO in non-polar systems. BTX free.
DOWSIL™ FC 227TS Coating	Solvent based reactive silicone elastomer dispersion to improve dry touch and breathability. Suitable for solvent-based system.
XIAMETER™ OFX-0531 Fluid	Solvent based reactive aminomethoxy-functional polydimethylsiloxane, offers premium durable softening, abrasion resistance and water repellency. Suitable for non-polar systems.
XIAMETER™ OFX-0190 Fluid	100% silicone polyether providing levelling and foam control to water-based systems. BTX free.
DOWSIL™ OFX-0400 Fluid	100% silicone polyether to improve slip, levelling, anti-blocking and spreading. Suitable for water-based polyurethane systems. BTX free.
XIAMETER™ OFX-5211 Fluid	Formulation additive for leveling and wetting to improve surface appearance finishes of aqueous based binders. BTX free.

Products indicated as "BTX-free" have been manufactured without intentionally adding benzene, toluene, or 3-xylene isomer components.

## Synthetic leather - Product selector guide

Product	Touch / softening	Breathability	Copolymer for polyurethane	Leveling	Foam control	Wetting agent
DOWSIL™ BY 16-201	X	X	X			
DOWSIL™ SF 8427 Fluid	X		X	X		
DOWSIL™ 1248 Fluid			X	X		
DOWSIL™ FC 227TS Coating	X	X				
XIAMETER™ OFX-0531 Fluid	X					
XIAMETER™ OFX-0190 Fluid				X	X	
DOWSIL™ OFX-0400 Fluid				X		
XIAMETER™ OFX-5211 Fluid				X		X

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