

WACKER

CREATING TOMORROW'S SOLUTIONS

TEXTILES, LEATHER & FIBERS

A SILICONE FINISH
CONFERS A VERY NATURAL
QUALITY ON LEATHER



SIPELL®
AND LEATHER – A UNIQUE COMBINATION
OF EMOTION AND FUNCTIONALITY

WHAT SETS SILICONES APART IS THEIR VERSATILITY

Selectively designing the appearance, hand and functional properties of a unique material like leather requires plenty of experience along with products that keep their natural attractiveness. SIPELL® from WACKER offers exceptionally versatile solutions.

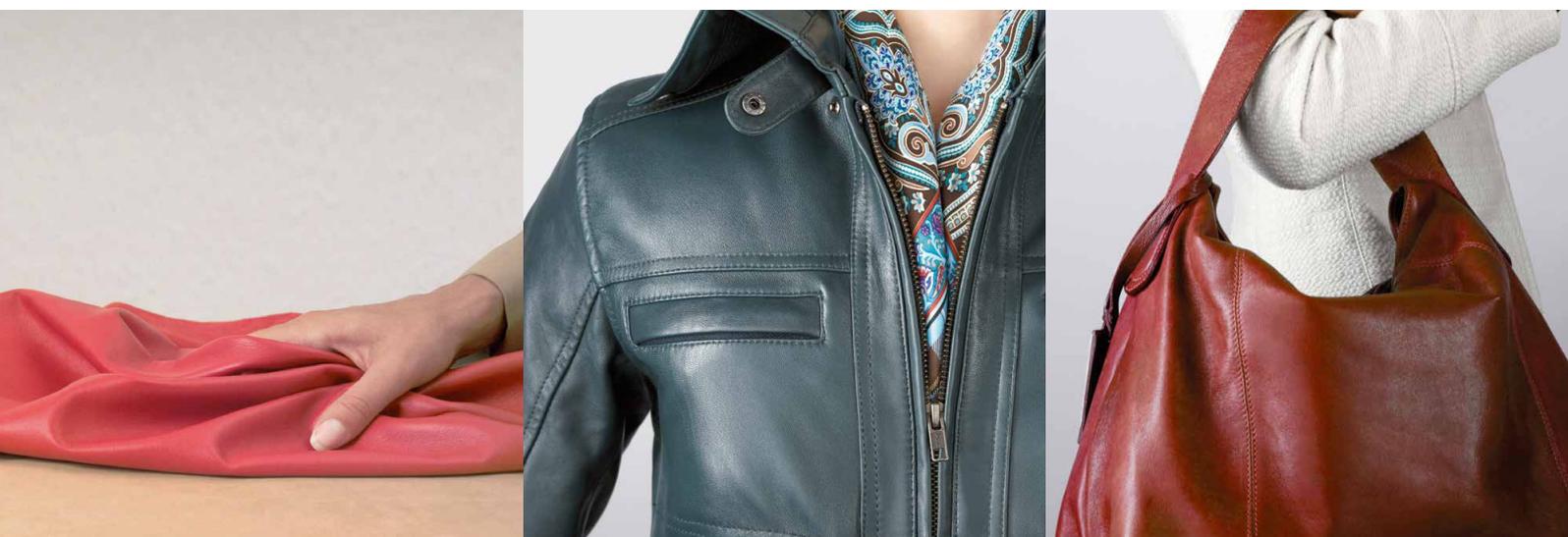
Fine leather enjoys a long tradition as the material of choice in a wide variety of fields. New application and design options are promising it a confident future as well. The secret to meeting market requirements, which currently pose a huge challenge to the leather industry, lies in creativity and innovative finishing technologies.

Silicones offer unrivaled opportunities here. Not only are they extremely versatile in wet-end and finishing applications, but as process aids, they also control and prevent foam. The benefits offered by SIPELL® include a customized hand ranging from extremely soft to waxy, enhanced abrasion resistance for tough, durable leather, water repellency combined with improved hand, coating-flow perfection in patent leather and an enhanced polishing effect. What is also special about these highly sophisticated SIPELL® silicones is that they control the leather's properties very selectively, without changing its natural character.

Their outstanding performance is a result of application-oriented research and development at WACKER. Our leather specialists are partners to the international leather industry. They know the industry's requirements and develop innovative, precisely tailored solutions. WACKER builds on the vast reservoir of knowledge and experience of a global technology leader and innovation partner to the chemical industry, with over 40 years of silicones expertise. So you can rest assured that you will get precisely the solution you need, as well as reliable service the world over.

SIPELL®

PROPERTIES AND APPLICATIONS



Product	Description	Properties		
		Hand	Abrasion resistance	Good water repellency
Finishing				
SIPELL® AE 34	Microemulsion, nonionic, amino-functional silicone fluid	•		
SIPELL® AE 45	Macroemulsion, nonionic, amino-functional silicone fluid	•		
SIPELL® CE 27	Water-based dispersion, pre-cured silicone rubber	•		
SIPELL® AE 654 F	Solvent-based amino-functional reactive silicone fluid	•		
SIPELL® AE 655 F	Reactive amino-functional silicone fluid	•		
SIPELL® VF 35	Dispersion of a silicone copolymer			
SIPELL® AP 608	Dispersion of a high-molecular silicone polymer	•	•	
SIPELL® VF 50	Emulsion of a film-forming silicone	•		
SIPELL® RE 55 M	Solvent-free silicone fluid/resin mixture			•
Wet-end				
SIPELL® RE 61 F	Mercapto-functional silicone fluid			•
SIPELL® RE 63 F	Reactive, epoxy-functional silicone fluid			•
WACKER® FLUID AK 100, 350	Non-functional silicone fluids	•		•
Process aid				
WACKER IM 22	Glycol-functional silicone fluid (carbinol grade)			
WACKER FLUID L 053	Glycol-functional silicone fluid			
SILFOAM® SD 670	Self-emulsifying antifoam agent			
SILFOAM® SD 882	Self-emulsifying antifoam agent			
WACKER® FLUID L 066	Glycol-functional silicone fluid			
SILFOAM® SE 47	Silicone antifoam emulsion, nonionic			



Improved levelling	System		Applications			Product	
	Water-based	Solvent-based	Automotive	Furniture	Garment	Shoe-upper leather	
							Finishing
	•			•	•		SIPELL® AE 34
	•			•	•		SIPELL® AE 45
	•			•	•		SIPELL® CE 27
		•			•		SIPELL® AE 654 F
		•			•		SIPELL® AE 655 F
	•			•	•		SIPELL® VF 35
	•		•	•			SIPELL® AP 608
	•		•	•	•		SIPELL® VF 50
		•			•	•	SIPELL® RE 55 M
							Wet-end
						•	SIPELL® RE 61 F
						•	SIPELL® RE 63 F
					•	•	WACKER® FLUID AK 100, 350
							Process aid
•							WACKER IM 22
•							WACKER FLUID L 053
	•	•					SILFOAM® SD 670
	•	•					SILFOAM® SD 882
•							WACKER® FLUID L 066
	•						SILFOAM® SE 47

SILICONES DO EVERYTHING REQUIRED OF LEATHER

Customized leather hand

Soft, smooth or supple, dry, oily or waxy, or something quite different – a leather's hand is what makes people buy it. SIPELL® is the key to customized and fashionable leather properties that can be controlled selectively. To this end, the emulsions and fluids are used both in wet-end processes and in finishing.

High abrasion resistance

Wherever durability is important, such as with automotive and upholstery leathers, abrasion resistance is an important quality criterion. Topcoat formulations containing SIPELL® Silicone emulsions will satisfy all requirements for leather. The silicones maximize abrasion resistance and improve the Taber and Veslic values. As solventless emulsions, they comply with the strictest environmental standards. They also combine well with all standard coating agents.

Effective water repellency

Leathers for shoes, clothing, sport articles, automobiles, furniture and the military sector must do more than satisfy individual design wishes. They must also be functional. Our innovative SIPELL® silicone fluids were developed to make leather water-repellent where desired. Formulated as water-based water-repellency agents for use in wet-end applications, they render leathers permanently hydrophobic. The leathers retain their natural suppleness and gain an excellent hand.

Perfectly even coatings

Fine patent leather only boasts that special look if the varnish is perfectly even. SIPELL® glycol-functional silicone fluids are the ideal coating additives for optimizing the results of the finishing process, where water-based coatings are given preference. These silicone fluids facilitate processing and prevent uneven leveling and cratering. They also enhance the slip properties of the finished product and produce a permanent gloss.

Easy processing

Dyeing, fat-liquoring and wastewater treatment often involve considerable foam formation, which is much to the detriment of quality consistency and certain leather effects. This problem can be overcome by using highly effective silicone process aids to selectively control and prevent foam. There is hardly any better way to control the various processing stages and, ultimately, the appearance of the leather.

Tailored solutions for Automotive leathers

- Creates an impression of class
- Highly abrasion-resistant
- A specially pleasant hand
- Perfect comfort

Furniture leathers

- Special hand from soft, oily or waxy to dry or smooth
- Hardwearing with enhanced abrasion resistance

Garment leathers

- High-quality hand and surface appearance
- Intensive colors
- Can be hydrophobized to render them water resistant

Shoe-upper leathers

- High resistance to water and weather
- Perfect gloss of patent leather

Personal service

The SIPELL® product range is exceptionally broad. After all, your leather should have exactly the properties you want. To enable you to implement your ideas and requirements even better, our applications specialists will be glad to work with you and develop new solutions jointly – irrespective of whether your needs relate to the hand or functionality of the leather.

Wherever you are located, you can rely on our technical service. Our specialists will be glad to help. The table alongside provides an overview of SIPELL® applications.

EXPERTISE AND SERVICE NETWORK ON FIVE CONTINENTS



WACKER is one of the world's leading and most research-intensive chemical companies, with total sales of €4.63 billion. Products range from silicones, binders and polymer additives for diverse industrial sectors to bio-engineered pharmaceutical actives and hyperpure silicon for semiconductor and solar applications. As a technology leader focusing on sustainability, WACKER promotes products and ideas that offer a high value-added potential to ensure that current and future generations enjoy a better quality of life based on energy efficiency and protection of the climate and environment. Spanning

the globe with five business divisions, operating 24 production sites, WACKER is currently active in over 100 countries. The Group maintains subsidiaries and sales offices in 29 countries across Europe, the Americas and Asia – including a solidly established presence in China. With a workforce of 16,300, WACKER sees itself as a reliable innovation partner that develops trailblazing solutions for, and in collaboration with, its customers. WACKER also helps them boost their own success. Our technical centers employ local specialists who assist customers worldwide in the development of products

tailored to regional demands, supporting them during every stage of their complex production processes, if required. WACKER e-solutions are online services provided via our customer portal and as integrated process solutions. Our customers and business partners thus benefit from comprehensive information and reliable service to enable projects and orders to be handled fast, reliably and highly efficiently. Visit us anywhere, anytime around the world at:

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