

CENUSIL®

ELASTOSIL®

CONSTRUCTION | SILICONE SEALANTS

OUTPERFORMING IN SEALING NEEDS
SILICONE SEALANTS
FOR SUSTAINABLE SOLUTIONS



STRIVE FOR AND BENEFIT FROM HIGH-PERFORMANCE SILICONE SEALANTS

Silicone sealants have become vital components in building and assembly in today's demanding world. More importantly they are indispensable as sustainable products in essentially all key industries. The CENUSIL® and ELASTOSIL® silicone sealant brands are the products of choice for construction and industrial applications from connection and expansion joints to sanitary sealing needs. Furthermore, if you are seeking specific sealants – whether suitable for natural stone, displaying fire retardancy properties or requiring compatibility in food-contact applications our portfolio meets these needs.

Seek Your Advantages

Silicones show significant advantages over alternative technologies: Ensure you benefit from the advantages gained in your specific application by selecting the appropriate product. WACKER's silicone sealants

- Give outstanding weathering and aging properties
- Display unparalleled UV stability and temperature resistance
- Exhibit constant stress-strain values at extreme temperatures (-30 °C to 80 °C) rendering outstanding suitability where joint expansion occurs
- Remain flexible at widely varying temperatures (-40 to 150 °C)

Opt For Sustainability

Silicones offer a number of properties allowing efficient processes and optimized products – thereby contributing to sustainability.

WACKER's silicone sealants

- Have greater longevity over alternative sealing systems
- Improve process efficiency, energy consumption, and generally increase cost-efficiency
- Permit airtight sealing of windows and doors reducing invasion of environmental pollutants
- Reliably protect windows and masonry in extreme weather conditions, thus preventing moisture, cold and heat influx

Go for the Optimum

WACKER is one of the world's leading construction solution providers. Whether new construction or refurbishment, WACKER products meet the most exacting demands by offering the best balance between quality and cost-efficiency. Our comprehensive portfolio – based on a unique combination of two fully fledged technology platforms silicones and polymer chemistry – as well as our competent support is geared to select the optimum for your specific request. Talk to us! www.wacker.com/construction



PRODUCT OVERVIEW – PROPERTIES AND APPLICATIONS

Properties	Density at 25 °C (ISO 1183-1 A) [g/cm ³]	Consistency (ISO 7390 Profile U 20)	Extrusion Rate (3 mm Die Press Pressure 6.3 bar) [g/min]	Skin-forming Time 23 °C/50 % RH) [min]
ELASTOSIL® 4100	1.02	Non-sag	450	20
ELASTOSIL® 4300	1.03	Non-sag	250	15
ELASTOSIL® 4500	1.03	Non-sag	250	20
ELASTOSIL® 4710	1.02	Non-sag	450	10
ELASTOSIL® 5000, 5100	1.01	Non-sag	500	20
ELASTOSIL® 6000, 6100	0.98	Non-sag	800	25
ELASTOSIL® 7000, 7100 N	1.02	Non-sag	200	35
ELASTOSIL® 7600	1.50	Non-sag	150	25
ELASTOSIL® 7750 N	1.40	Non-sag	130	20
ELASTOSIL® 8000 N, 8100 N	1.01	Non-sag	300	35
ELASTOSIL® 8510	1.02	Non-sag	400	15
ELASTOSIL® 9000 N, 9100 N	0.99	Non-sag	400	35
CENUSIL® 631	0.97	Non-sag	900	20

Application	Acetoxy (Acid Cure)		Alkoxy (Neutral Cure)	
	Generally Appropriate	In Demanding Applications	Generally Appropriate	In Demanding Applications
Glazing	ELASTOSIL® 5100**	ELASTOSIL® 4100**	ELASTOSIL® 8100 N** / 8000 N	ELASTOSIL® 7100 N**
Perimeter			ELASTOSIL® 7100 N**	ELASTOSIL® 7750 N*
Sanitary	ELASTOSIL® 6100**	ELASTOSIL® 5100**	ELASTOSIL® 9100 N**	ELASTOSIL® 8100 N**
General Purpose	CENUSIL® 631**	ELASTOSIL® 6100**	ELASTOSIL® 9100 N**	ELASTOSIL® 8100 N**/ 8000 N
Specialty Sealants				
Natural stone				ELASTOSIL® 8510**
NSF grade		ELASTOSIL® 4710		
Aquarium		ELASTOSIL® 4300		
Fire protection				ELASTOSIL® 7600*
High temperature		ELASTOSIL® 4500		

* Filled systems

** Contains fungicide



Tensile Strength (ISO 8339) [N/mm ²]	Elongation At Break (ISO 8339) [%]	Modulus At 100% Elongation (ISO 8339) [N/mm ²]	Shore A Hardness (ISO 868)	Tear Strength (ISO 34-Meth.C) [N/mm]	Movement Capability (ISO 9047) [%]
0.6	250	0.35	20	4.2	25
0.8	200	0.55	22	6.1	25
0.7	250	0.45	25	4.2	-
0.6	250	0.37	20	4.2	25
0.7	250	0.38	18	4.5	25
0.6	150	0.36	18	4.0	-
0.7	300	0.38	24	4.6	25
0.6	300	0.40	25	4.0	25
0.5	250	0.40	22	5.0	25
0.7	300	0.37	24	4.5	25
0.5	250	0.35	21	4.0	25
0.5	250	0.37	24	3.0	20
0.6	250	0.30	14	5.0	12,5

IN PURSUIT OF INNOVATION AND QUALITY

With over 60 years' experience in silicon chemistry, WACKER played a pioneering role in developing silicone sealants and remains a technological leader in this area. State-of-the-art plants manufacture silicone sealant compounds – from silicon metal down to the ready-to-use cartridge. Our 4 plants across the globe – Burghausen, Nünchritz, Jincheon and Zhangjiagang – supply world markets with a sealants portfolio in accordance with regional specifics.

Your Qualified Advisor

Our local staff offers the expertise and service sought by today's demanding customers across five continents. Our regional Technical Centers attend to varying customer requests as well as giving support in the areas of certification by the diverse regional institutes. Turnkey solutions as well as optimisation of formulations is a service we are more than happy to give our customers. Our Research & Development team constantly looks to improve the products. Congruent with increasingly stringent EH&S regulations we constantly screen raw materials used and modify sealants accordingly. Our particular range of specialty silicone sealants – from food-grade products to systems suitable in natural stone sealing – reflects our endeavours to offer leading-edge solutions.

Your Benefits

- Close proximity to a supplier and his services offering various options from container to drum, down to cartridge
- Extensive expertise in silicone sealant manufacture
- External certification support
- Proficiency in cartridge management and assistance in implementing private label business
- Consistent quality according to industry standards guarantees dependability
- Technological innovation means cost-efficient and sustainable products

Two Curing Options

Room temperature vulcanizing (RTV) systems, curing by contact with moisture vapor in the air.

Acidic Cure (Acetoxy):

Outstanding adhesion to silicate substrates thereby highly suitable for glass and ceramics.

Unsuitable for alkaline substrates such as concrete, mortars or corrodible surfaces such as metals

Neutral Cure (Alkoxy):

Excellent adhesion to metal, plastics, concrete as well as glass and ceramics. Particularly suitable as non-corrosive sealing solution for connection and expansion joints.

Primers

The ELASTOSIL® and CENUSIL® silicone sealant range has been developed to adhere to a wide range of substrates. However, some substrates continue to present a problem with respect to adhesion profile – non-polar plastics as well as certain metals will require priming to achieve optimum adhesion. WACKER has a range of specially developed ready-to-use primers here. For further details speak to us.

Industry Standards/CE Labeling

Many grades from our product range have been specifically tested according to various standards across the globe.

If you require documentation as to whether a given sealant meets specific ASTM, DIN or EN standards or complies with local regulations such as SNJF or AENOR, do address us with your particular requirement and we will outline our findings for the grade in question. As the CE labeling legislation comes into force in Europe, relevant documentation has been compiled by our EH&S staff. Feel free to address us if you require support here.





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