



Prodotti Olio

Scheda Tecnica

| Viscosity at 25 °C <sup>1)</sup>    |         | Viscosity-temperature coefficient <sup>2)</sup> | Density at 25 °C | Coefficient of thermal expansion at 0 - 150 °C | Thermal conductivity at 50 °C | Flash point ISO 2592 acc. to Cleveland | Pour point DIN 51794 | Volatility <sup>3)</sup> | Brechungsindex bei 25 °C | Refractive index at 25 °C and 10 <sup>6</sup> Hz | Surface tension at 25 °C DIN 53 914 |
|-------------------------------------|---------|---|------------------|--|-------------------------------|--|----------------------|--------------------------|--------------------------|--|-------------------------------------|
| Kinematic                           | Dynamic |   |                  |  |                               |  |                      |                          |                          |  |                                     |
| [mm <sup>2</sup> ·s <sup>-1</sup> ] | [mPa·s] |   |                  |  |                               |  |                      |                          |                          |  |                                     |
| 0.65                                | 0.6     | -   | 0.76             | -  | 0.10                          | - <sup>3)</sup>                        | -68                  | Kp100 °C/1 bar           | 1.375                    | 2.18   | 15.9                                |
| 5                                   | 4.6     | -   | 0.92             | -  | 0.12                          | > 130                                  | < -80                | < 4 (1h/150 °C)          | 1.396                    | 2.49   | 19.2                                |
| 10                                  | 9.3     | 0.56  | 0.93             | 10.0   | 0.13                          | > 165                                  | < -80                | < 1 (1h/150 °C)          | 1.399                    | 2.61   | 20.2                                |
| 20                                  | 19      | 0.575   | 0.945            | 9.7  | 0.14                          | > 200                                  | < -70                | < 1 (1h/150 °C)          | 1.401                    | 2.68   | 20.6                                |
| 35                                  | 33      | 0.585   | 0.955            | 9.5  | 0.14                          | > 235                                  | < -60                | < 6                      | 1.402                    | 2.69   | 20.7                                |
| 50                                  | 48      | 0.59  | 0.96             | 9.5  | 0.15                          | > 250                                  | -55                  | < 2                      | 1.402                    | 2.71   | 20.8                                |
| 100                                 | 96      | 0.59  | 0.963            | 9.4  | 0.15                          | > 275                                  | -55                  | < 1.5                    | 1.403                    | 2.73   | 20.9                                |
| 150                                 | 145     | 0.595   | 0.965            | 9.3  | 0.15                          | > 300                                  | -50                  | < 1.5                    | 1.403                    | 2.73   | 21.0                                |
| 200                                 | 193     | 0.595   | 0.966            | 9.3  | 0.15                          | > 300                                  | -50                  | < 1.5                    | 1.403                    | 2.73   | 21.0                                |
| 250                                 | 240     | 0.595   | 0.967            | 9.3  | 0.15                          | > 300                                  | -50                  | < 1.5                    | 1.403                    | 2.73   | 21.0                                |
| 350                                 | 340     | 0.595   | 0.968            | 9.25   | 0.15                          | > 300                                  | -50                  | < 1.5                    | 1.4035                   | 2.73   | 21.1                                |
| 500                                 | 485     | 0.60  | 0.969            | 9.25   | 0.15                          | > 300                                  | -50                  | < 1.5                    | 1.4035                   | 2.74   | 21.1                                |
| 1 000                               | 970     | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -50                  | < 1.5                    | 1.4035                   | 2.74   | 21.2                                |
| 2 000                               | 1 940   | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -50                  | < 1.5                    | 1.4037                   | 2.74   | 21.3                                |
| 5 000                               | 4 850   | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -50                  | < 1.5                    | 1.4037                   | 2.74   | 21.4                                |
| 10 000                              | 9 700   | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -45                  | < 1.5                    | 1.4037                   | 2.75   | 21.5                                |
| 12 500                              | 12 100  | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -45                  | < 1.5                    | 1.4037                   | 2.75   | 21.5                                |
| 20 000                              | 19 400  | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -45                  | < 1.0                    | 1.4037                   | 2.76   | 21.5                                |
| 30 000                              | 29 100  | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -45                  | < 1.0                    | 1.4037                   | 2.76   | 21.5                                |
| 60 000                              | 58 200  | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -45                  | < 0.75                   | 1.4037                   | 2.76   | 21.5                                |
| 80 000                              | 77 600  | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -45                  | < 0.75                   | 1.4037                   | 2.76   | 21.5                                |
| 100 000                             | 97 000  | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -40                  | < 0.75                   | 1.4037                   | 2.76   | 21.5                                |
| 200 000                             | 194 000 | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -40                  | < 0.75                   | 1.4037                   | 2.76   | 21.5                                |
| 300 000                             | 290 000 | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -40                  | < 0.75                   | 1.4037                   | 2.76   | 21.5                                |
| 500 000                             | 485 000 | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -40                  | < 0.75                   | 1.4037                   | 2.76   | 21.5                                |
| 600 000                             | 582 000 | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -40                  | < 0.75                   | 1.4037                   | 2.76   | 21.5                                |
| 1 000 000                           | 970 000 | 0.60  | 0.97             | 9.2  | 0.15                          | > 320                                  | -40                  | < 1.0                    | 1.4037                   | 2.76   | 21.5                                |

1) The tolerance for up to 50 mm<sup>2</sup> s<sup>-1</sup> is ± 10 %, for higher viscosity fluids ± 5 %  
 2) Viscosity-temperature coefficient: 1 - kinematic viscosity at 50 °C  
 kinematic viscosity at 25 °C  
 3) Flash point determination in accordance with DIN 51 755  
 4) Percentage weight loss of a 5-g sample weighed into a 10-cm<sup>3</sup> metal capsule and heated at 230 °C for two hours

All figures are intended as a guide and should not be used in preparing specifications.



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## Applications of Wacker silicone fluids AK

| Used as                                  | Properties   | Applications   |
|--|--|--|
| Release agents                           | Resistant to high and low temperatures, do not form residues on mould surfaces, one application sufficient for many moulding operations; prevent thermoplastic materials from sticking to mould surfaces | Demoulding of rubber and plastics parts, eg, in tyre manufacture and in the moulding of polyamide, cellulose acetate, polystyrene and PVC; packaging industry  |
| Lubricants                               | Impart excellent slip to plastics and rubber as well as water repellency; reduce surface friction  | Plastics bearings, films, cutting tools, mouldings and extrusions, sewing threads  |
| Damping media                            | Physical properties are practically unchanged at temperatures above 200 °C   | Speed regulators, fluid clutches (eg, for fans), nautical and aeronautical instruments, gyro-compasses, shock-absorbing struts, recording instruments, time regulators, pneumatic valves, overload relays, sound pickups |
| Hydraulic fluids                         | Excellent viscosity/temperature characteristics, high compressibility and stability under shear  | Shock absorbers, pumps, brake cylinders  |
| Liquid dielectrics                       | Electrical properties remain practically unchanged at high and low temperatures and over a wide range of frequencies; radiation-resistant  | Coolants (eg, for magnetrons and other heat-emitting units), transformers, capacitors, high-voltage tubes, aerospace applications (air is no longer effective as coolant at high altitudes)                              |
| Water repellents                         | Low surface tension, strongly water repellent, no nutrient for bacteria and fungi  | Glass, ceramics, laminates; switches, insulators; textiles   |
| Antifoam agents                          | Effective even in very small amounts, odourless and tasteless  | Preventing foaming in non-aqueous systems such as mineral and vegetable oils   |
| Cosmetic and dermatological preparations | Non-irritating, non-sensitizing; they form a water repellent protective film which allows the skin to breathe and does not irritate it.  | Skin-care creams, sun creams, hair-care preparations, insect repellents  |
| Creams and polishes                      | Gloss-retaining, water-repellent, impart a silky feel  | Car and furniture polishes, shoe creams and floor polishes   |



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### Products for Special Applications

| Wacker product name        | Special properties                                  | kinematic viscosity [mm <sup>2</sup> s <sup>-1</sup> ], 75°C                   | Application areas                                   |
|----------------------------|---|--|---|
| Silicone Fluids AKF        | Extremely low volatility                            | 100/300/1000/10000   | Release agent for, eg, photocopiers, laser printers |
| Silicone Fluid TR 50       | Low volatility, very good electrical properties     | 50   | Transformer fluids                                  |
| SILFAR®                    | Low volatility, high purity                         | 350/500/1000   | Pharmaceutical applications                         |
| Wacker-Belsil®DM           | geringe Flüchtigkeiten, hohe Reinheit               | 0,65/5/10/20/50/100/<br>350/500/1000/12500/<br>60000/300000/<br>500000/1000000 | Cosmetic applications                               |
| Silicone Fluids AKC        | Particularly heat stable                            | 2000/4000/5000/6000/<br>125000/300000/500000                                   | Fan clutches, heat transfer                         |
| Silicone Fluids AK ...stab | Increased fatigue resistance in contact with metals | 60000/100000/<br>150000/200000/<br>300000/500000/<br>600000                    | Fluid clutches, damping media                       |

Il prodotto è disponibile esclusivamente in fusti da 20 Kg.