

# BLUESIL® FLD 47V50 A2 - 47V1000 A2

## Middle Viscosity Silicone Oils

Technical Data Sheet n° 076007-2018– June/2021

### Description

**BLUESIL® FLD 47V50 A2 - 47V1000 A2** are straight chained polydimethylsiloxane fluids.

### Examples of applications

**BLUESIL® FLD 47V50 A2 - 47V1000 A2** are used as:

- Thermostatic fluids (-50°C to +200°C),
- Anti-blotting products for photocopying machines,
- Thinning and plastifying agents for RTV's and silicone sealants,
- Raw material for Antifoam
- Lubricating and heat protecting agents for textile threads ( synthetic sewing threads),
- Ingredients in maintenance products (polishes, wax polishes, floor and furniture polishes, etc.),
- Paint additives (anti-cratering, anti-floating/flooding and anti-scratching effects, etc.),
- Water repellent treatment:
  - of powders (for paints and plastics),
  - of fibres: glass fibres,
- Release agents (mould release of plastics and metal castings),
- Lubricants (lubrication of elastomers or plastics on metal),
- Surfactants for styrene-butadiene foam.

### Key benefits

**BLUESIL® FLD 47V50 A2 - 47V1000 A2** have the following properties:

- Very good resistance to high and low temperature,
- Good combustion resistance,
- Low surface tension,
- High compressibility,
- Absence of ageing upon exposure to atmospheric agents,
- Good oxidation resistance,
- Little change in viscosity with temperature,
- Good resistance to high and prolonged shear stress.
- The content of D4, D5, D6 are all lower than 0.1% respectively.

### Typical properties

Properties	<b>BLUESIL® FLD 47V50 A2 - 47V1000 A2</b>				
	47V50	47V100	47V350	47V500	47V1000
Appearance	Colourless, limpid liquid				
Viscosity at 25°C, mm <sup>2</sup> /s, approx.	50	100	350	500	1 000
Specific gravity at 25°C, approx.	0.959	0.965	0.970	0.970	0.970
Flash point (Open cup), °C, approx.	≥300	≥300	≥300	≥300	≥300
Freezing point, °C, approx.	-55	-55	-50	-50	-50
Refractive index at	1.402	1.403	1.403	1.403	1.403

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25°C, approx.					
Surface tension at 25°C, mN/m, approx.	20.7	20.9	21.1	21.1	21.1
Vapor pressure at 200°C, Pa, approx.	1.33	1.33	1.33	1.33	1.33
Volume expansion coeff. Between 25°C and 100°C, cm <sup>3</sup> /cm <sup>3</sup> /°C, approx.	10.5* 10 <sup>-4</sup>	9.45* 10 <sup>-4</sup>	9.45* 10 <sup>-4</sup>	9.45* 10 <sup>-4</sup>	9.45* 10 <sup>-4</sup>
Specific heat capacity between 40°C and 200°C, J/(g.K)	1.46	1.46	1.46	1.46	1.46
Thermal conductivity, W/(m.K), approx.	0.16	0.16	0.16	0.16	0.16
Viscosity/temperature coeff. [1], approx.	0.59	0.60	0.62	0.62	0.62
D4, %, <	0.1	0.1	0.1	0.1	0.1
D5, %, <	0.1	0.1	0.1	0.1	0.1
D6, %, <	0.1	0.1	0.1	0.1	0.1
Dielectric strength at 25°C, KV/mm, approx	15	16	16	16	16
Dielectric constant at 25°C between 0.5 and 100kHz, approx	2.8	2.8	2.8	2.8	2.8
Power factor at 25 °C at 100kHz, approx	1*10 <sup>-4</sup>				
Permittivity at 25 °C, Ω .cm, approx	1*10 <sup>14</sup>	1*10 <sup>15</sup>	1*10 <sup>15</sup>	1*10 <sup>15</sup>	1*10 <sup>15</sup>

[1] Viscosity/temperature coefficient =1- (Viscosity at 99°C/Viscosity at 38°C)

**Packaging**

**BLUESIL® FLD 47V50 A2 - 47V1000 A2** are available in 25kg and 200 kg drums, in 1000kg containers or in 20 tones tank.

**Storage and shelf life**

When stored in its original packaging at a temperature between -20 and +50 °C, **BLUESIL® FLD 47V50 A2 - 47V1000 A2** may be stored for up to 36 months from its date of manufacture. Comply with the storage instructions and expiry date marked on the packaging.

Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.

**Safety**

Please consult the Safety Data Sheet of **BLUESIL® FLD 47V50 A2 - 47V1000 A2**

# BLUESIL® FLD 47V50 A2 - 47V1000 A2

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