#### Technical Data Sheet n° SIL 11 252 3 – July 2011 Cancels and replaces SIL 96 697 3

BLUESIL<sup>™</sup> FLD 47 V 50 to 47 V 1000 Distributed By Freeman Manufacturing & Supply Co. www.freemansupply.com 800-321-8511 FREEMAN



member!

Description	BLUESIL FLD 47 V 50 to 47 V 1000 are straight chained polydimethylsiloxanic fluids.				
Examples of applications	BLUESIL FLD 47 V 50 to 47 V 1000 are used as:				
	<ul> <li>Thermostatic fluids (– 50 °C to + 200 °C).</li> </ul>				
	<ul> <li>Dielectric fluids (impregnation of paper for condensers).</li> </ul>				
	<ul> <li>Anti-blotting products for photocopying machines.</li> </ul>				
	<ul> <li>Thinning and plastifying agents for RTV's and silicone sealants.</li> </ul>				
	• Lubricating and heat protecting agents for textile threads (synthetic sewing threads).				
	<ul> <li>Ingredients in maintenance products (polishes, wax polishes, floor and furniture polishes, etc.).</li> </ul>				
	• 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.				
	<ul> <li>Release agents (mould release of plastics and metal castings).</li> </ul>				
	<ul> <li>Lubricants (lubrication of elastomers or plastics on metals).</li> </ul>				
	Surfactants for styrene-butadiene foam.				
Advantages	BLUESIL FLD 47 V 50 to 47 V 1000 have the following properties:				
	<ul> <li>Very good resistance to high and low temperature.</li> </ul>				
	Good combustion resistance.				
	Good dielectric properties.				
	Low surface tension.				
	High compressibility.				
	<ul> <li>Absence of ageing upon exposure to atmospheric agents.</li> </ul>				
	Good oxidation resistance.				
	Little change in viscosity with temperature.				
	<ul> <li>Good resistance to high and prolonged shear stress.</li> </ul>				



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## **Characteristics**

Properties	BLUESIL FLD						
	47V50	47V100	47V300	47V350	47V500	47V1000	
Appearance	Colourless, limpid liquid						
Viscosity at 25 °C, mm²/s, approx.	50	100	300	350	500	1000	
Specific gravity at 25 °C, approx.	0.959	0.965	0.970	0.970	0.970	0.970	
Flash point (closed cup), °C, approx.	280	≥ 300	≥ 300	≥ 300	≥ 300	≥ 300	
Freezing point, °C, approx.	- 55	- 55	- 50	- 50	- 50	- 50	
Refractive index at 25 °C, approx.	1.402	1.403	1.403	1.403	1.403	1.403	
Surface tension at 25 °C, mN/m, approx.	20.7	20.9	21.1	21.1	21.1	21.1	
Vapour pressure at 200 °C, Pa, approx.	1.33	1.33	1.33	1.33	1.33	1.33	
Volume expansion coeff. between 25 and 100 °C, approx	1.05.10 <sup>-3</sup>	9.45.10 <sup>-4</sup>					
Specific heat capacity between 40 and 200°C, J/g, °C	1.46	1.46	1.46	1.46	1.46	1.46	
Thermal conductivity, W/m°C, approx.	0.16	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	0.62	
Dielectric strength at 25 °C, kV/mm, approx.	15	16	16	16	16	16	
Dielectric constant at 25 °C between 0.5 and 100 kHz, approx.	2.80	2.80	2.80	2.80	2.80	2.80	
Power factor at 25 °C, at 100 kHz, approx.	1.10 <sup>-4</sup>	1.10 <sup>-4</sup>	1.10 <sup>-4</sup>	1.10 <sup>-4</sup>	1.10 <sup>-4</sup>	1.10 <sup>-4</sup>	
Permittivity at 25 °C, $\Omega$ .cm, approx.	1.10 <sup>14</sup>	1.10 <sup>15</sup>					

(1) Viscosity / temperature coefficient = 1 - (viscosity at 100 °C / viscosity at 40 °C)

Packaging

BLUESIL FLD 47 V 50 to 47 V 1000 are available in 25 and 200 kg drums, in 1000 kg containers or in 20 tonnes tankers.





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Storage and shelf lifeWhen stored in its original unopened packaging at a temperature of between – 20 and<br/>+ 50 °C, BLUESIL FLD 47 V 50 to 47 V 1000 may be stored for up to 3 years from its<br/>date of manufacture (expiry date). Comply with the storage instructions and expiry date<br/>marked on the packaging.<br/>Past this date, Bluestar Silicones no longer guarantees that the product meets the<br/>sales specifications.SafetyConsult the Safety Data Sheet for BLUESIL FLD 47 V 50 to 47 V 1000.

Visit our website www.bluestarsilicones.com

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