S I L I C O N E S

RHODORSIL® FLUIDS 47V5, 47V10 and 47V20

Rhodorsil® Fluids 47V5, 47V10 and 47V20 are 100% active dimethylpolysiloxane fluids. These silicone fluids are linear polymers suited for a wide variety of industrial applications.

Rhodorsil® Fluid 47V Series are available in a complete range of viscosities between 5 and 1,000,000 cSts, extending their usage to a wide variety of industrial applications.

FEATURES

- Excellent high and low temperature resistance
- Excellent resistance to oxidation and hydrolysis
- Excellent resistance to atmospheric agents: oxygen, ozone, moisture and UV light.
- Chemically inert and non-corrosive
- High compressibility
- Small change in viscosity due to temperature in comparison to non-silicone oils
- Good dielectric properties
- Low surface tension
- Low freezing point

APPLICATIONS

Rhodorsil® Fluids 47V5, 47V10 and 47V20 can be used as:

- Lubricants (plastic on plastic or plastics on metal).
- Hydraulic fluids for low temperatures.
- Dielectric fluids (impregnation of papers for capacitors).

PACKAGING/SHELF LIFE

Stored in the original, unopened container at room temperatures (5-25°C/41-77°F) **Rhodorsil® Fluids 47V5, 47V10 and 47V20** have a practically unlimited shelf life.

These fluids are supplied in:

- 180 Kg. drums for **Rhodorsil® Fluid 47V5**
- 200 Kg. drums for **Rhodorsil® Fluids 47V10 and 47V20**

SAFETY

Product Safety Information required for safe use is not included in this bulletin. Before handling, read the Material Safety Data Sheet and container labels for safe use, physical and health hazard information.

Silicones North America

911 East White Street, PO Box 11674, ● Rock Hill, SC 29731● Telephone (866) 4-RHODIA ● Fax (803) 329-5269
Email Address: silicones@us.rhodia.com ● Web Address: www.silicones.us.rhodia.com

TYPICAL PROPERTIES

	Rhodorsil® 47 V 5	Rhodorsil® 47 V 10	Rhodorsil® 47 V 20
Appearance	Clear Colorless Liquid		
Viscosity @ 25°C, cSt,	5	10	20
Specific Gravity @ 25°C	0.910	0.930	0.950
Flash point, °C,	136	162	230
Freezing point, °C,	-65	-65	-60
Refractive index @ 25°C,	1.397	1.399	1.400
Surface tension @ 25°C mN/m,	19.7	20.1	20.6
Vapor pressure @ 200°C, mbar,	-	$1.3x10^{-2}$	$1.33x10^{-2}$
Volume expansion coefficient between 25 and 100°C,	$1.05x10^{-3}$	$1.08x10^{-3}$	$1.07x10^{-3}$
Specific heat between 40 and 200°C, J/g.°C.	-	1.88	1.63
Thermal conductivity W/m.°C,	0.12	0.13	0.14
Viscosity/temperature coefficient (1)	0.55	0.57	0.59
Dielectric strength @ 25°C, kV/mm,	15	16	16
Dielectric constant @ 25°C between 0.5 and 100 kHz,	2.59	2.63	2.68
Loss angle tangent @ 25°C at 100 kHz,`	$1x10^{-5}$	$1x10^{-5}$	$1x10^{-5}$
Volume resistivity @ 25°C, □.cm,	$1x10^{15}$	$1x10^{15}$	$1x10^{15}$

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

Please note: The typical properties listed in this bulletin are not intended for use in preparing specifications for any particular application of Rhodorsil® silicone materials. Please contact our Technical Service Department for assistance in writing specifications.

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