

## 3M Fluorinert™ FC-770 Electronic Liquid

Category : Fluid

### Material Notes:

3M™ Fluorinert™ Liquid FC-770 is a non-conductive, thermally and chemically stable fluid with a wide liquid range (-125 to 95 deg C) for use in many low temperature heat transfer application such as reliability testing and cooling of electronics. Features and Benefits Thermal stability Chemical stability Wide liquid range Non-conductive Narrow boiling range Compatibility Information provided by 3M

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_3M-Fluorinert-FC-770-Electronic-Liquid.php](http://www.lookpolymers.com/polymer_3M-Fluorinert-FC-770-Electronic-Liquid.php)

Physical Properties	Metric	English	Comments
Density	1.793 g/cc	0.06478 lb/in <sup>3</sup>	Liquid
Solubility in Water	<= 0.00 %	<= 0.00 %	
Solubility	14 ppm	14 ppm	
Viscosity	1.359 cP	1.359 cP	Absolute
Kinematic Viscosity	0.79 cSt	0.79 cSt	
Molecular Weight	399 g/mol	399 g/mol	
Vapor Pressure	0.0657 bar	49.3 torr	
Surface Tension	14.8 dynes/cm	14.8 dynes/cm	

Thermal Properties	Metric	English	Comments
Heat of Vaporization	85.9 J/g	37.0 BTU/lb	Latent, at normal boiling point
CTE, linear	1480 μm/m-°C	822 μin/in-°F	
Specific Heat Capacity	1.038 J/g-°C	0.2481 BTU/lb-°F	Liquid
Thermal Conductivity	0.0630 W/m-K	0.437 BTU-in/hr-ft <sup>2</sup> -°F	Liquid
Boiling Point	95.0 °C @Pressure 0.101 MPa	203 °F @Pressure 14.7 psi	
Pour Point	-127 °C	-197 °F	

Optical Properties	Metric	English	Comments
Refractive Index	1.27	1.27	

Electrical Properties	Metric	English	Comments
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Electrical Properties	$\geq 3.00 \times 10^{14}$ ohm-cm Metric	$\geq 3.00 \times 10^{14}$ ohm-cm English	ASTM D257 Comments
Dielectric Constant	1.9	1.9	
Dielectric Strength	$\geq 1.57$ kV/mm	$\geq 40.0$ kV/in	0.1" gap

Chemical Properties	Metric	English	Comments
Critical Pressure	24.7 bar	18500 torr	Estimated
Critical Temperature	238 °C	460 °F	Calculated

Descriptive Properties	Value	Comments
Color	Clear, colorless	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China