

# SFR 320

## Phenyl-Methyl Silicone Fluid

### Product Description

SFR320 flame retardant is a phenyl-substituted silicone fluid that is combined with polycarbonate, and other transparent materials, to provide flame resistance. In clear thermoplastics, its high miscibility can also allow retention of optical transparency.

### Key Features and Typical Benefits

- Flame resistance
- Halogen-free formulation
- Effectiveness at low concentration
- Retention of optical transparency with clear thermoplastics

### Typical Physical Properties

Property	Value
Physical State	Liquid
Appearance	Clear
Viscosity at 25 °C (cSt)	80
Flash Point (°C)	188

Typical properties are average data and are not to be used as or to develop specifications.

### General Considerations for Use

The typical product usage range is approximately 1- 4% by weight; optimal levels may vary, however, and should be determined through preliminary evaluation of processing conditions and product loading required to achieve desired effect.

SFR320 silicone fluid can generally be incorporated into the polymer matrix by melt blending using a twin screw extruder. The silicone can be introduced into the extruder by absorption into granules, however, for best results, injection directly into the molten polymer by a liquid feeding system attached to the extruder is recommended.

### SFR320 Flame Retardant - Composition Example

No.	Composition [%]			FR Testing [1.6mm]	Transparency [1mm]	Izod Impact Notched [-30 °C]
	PC*	Anti-drip**	SFR320	UL94***	[%]	[KJ/m <sup>2</sup> ]
1	100	0	0	V2	89	12
2	99.85	0.15	0	V2	88	17
<b>3</b>	<b>98.85</b>	<b>0.15</b>	<b>1</b>	<b>V0</b>	<b>88</b>	<b>14</b>

\* General purpose medium viscosity non-FR Polycarbonate

\*\* Sulfonate salt

\*\*\* Test results are composition, molding & operator dependent

NOTE: Product formulations are included as illustrative examples only. Momentive makes no representation or warranty of any kind with regard to any such formulations, including, without limitation, concerning the efficacy or safety of any product manufactured using such formulation

### Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

### Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

### Product Safety, Handling and Storage

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

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