

## Element14™ PDMS 5K

### Element14\* PDMS 5K

#### Description

Element14 PDMS High Viscosity Oils are linear polydimethylsiloxane polymers with kinematic viscosities of 5000, 10000, 12500, 30000, 60000 and 100000 cSt.

#### Key Features and Benefits

Silicones differ from organic compounds in both their physical and chemical properties.

- High and low temperature stability
- Oxidative stability
- Chemically inert
- Low flammability
- Low surface tension
- Shear stability
- High compressibility
- Low vapor pressure
- Low odor
- Soft, smooth silky feel
- Non-oily feel
- Spreadability
- Low coefficient of friction
- Lubricious

#### Typical Physical Properties

|  |                   |                    |                      |                    |                    |                     |
|--|-------------------|--------------------|----------------------|--------------------|--------------------|---------------------|
|  | Element14 PDMS 5K | Element14 PDMS 10K | Element14 PDMS 12.5K | Element14 PDMS 30K | Element14 PDMS 60K | Element14 PDMS 100K |
|--|-------------------|--------------------|----------------------|--------------------|--------------------|---------------------|

| Viscosity cSt                                                | 5000                    | 10000         | 12500        | 30000         | 60000         | 100000       |
|--------------------------------------------------------------|-------------------------|---------------|--------------|---------------|---------------|--------------|
| Appearance                                                   | Clear, Colorless Liquid |               |              |               |               |              |
| Color (APHA)                                                 | <=15                    | <=15          | <=15         | <=15          | <=15          | <=15         |
| Weight Loss %                                                | 1.5                     | 1.5           | 1.5          | 1.5           | 1.5           | 1.5          |
| Viscosity @ 25°C                                             | 4500- 5000              | 9000- 11000   | 11250- 13750 | 27000-33000   | 54000-66000   | 90000-110000 |
| Specific Gravity g/cm <sup>3</sup> at 25°C (Guaranteed 1/50) | 0.967- 0.975            | 0.967-0.975   | 0.967- 0.975 | 0.969-0.977   | 0.969- 0.977  | 0.969-0.977  |
| Refractive Index at 25°C                                     | 1.4                     | 1.4015-1.4055 | 1.4          | 1.4015-1.4055 | 1.4015-1.4055 | 1.4          |
| Haze (NTU)                                                   | 8                       | 8             | 8            | 8             | 8             | 8            |
| Flash Point, Open Cup, °C                                    | >316                    | >316          | >316         | >316          | >316          | >316         |
| Pour Point, °C                                               | -50                     | -50           | -50          | -50           | -50           | -50          |
| Surface Tension Dynes/cm at 25°C                             | 21.3                    | 21.3          | 21.3         | 21.3          | 21.3          | 21.3         |

### Potential Applications

Element14 PDMS High Viscosity Oils may be considered for use in several industrial and consumer applications.

- Heat and mechanical transfer fluid
- Hydraulic fluid
- Electrical insulating fluid
- Water repellent
- Polish ingredient
- Mold release agent
- Lubricant
- Anti-foam
- Personal care ingredient
- Textile spin finishes

- Paints and coatings additive

### 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.

### 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.

### Limitations

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

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|                                |                                                    |                                                                                                                                              |                                                                                     |
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