

## Element14\* PDMS 10K

### Element14\* PDMS 10K

#### 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.

**Contact Information**

For product prices, availability, or order placement, contact our customer service at [Momentive.com/Customerservice/](https://www.momentive.com/Customerservice/)

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

**DISCLAIMER:**

**THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN.** Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier’s products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier’s standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

\*Element14 is a trademark of Momentive Performance Materials Inc.1033

**Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.**