

#### **Technical Data Sheet**



# 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/cm3 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									

\*Element14 is a trademark of Momentive Performance Materials Inc.
Page 1 of 2

Dynes/cm at 25°	21.3	21.3	21.3	21.3	21.3	21.3
C						

## **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 a 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 Material Safety Data Sheet (MSDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, and any special storage conditions required for safety. MSDS are available at <a href="www.momentive.com">www.momentive.com</a> or, upon request, from any Momentive Performance Materials (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 by visiting momentive.com/ContactSilicones.

For literature and technical assistance, visit our website at: www.momentive.com

#### DISCLAIMER

The information provided herein was believed by Momentive Performance Materials Inc. (collectively with its subsidiaries, "Momentive") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product, and to determine the suitability of the product for user's intended application or use. All products supplied by Momentive are subject to Momentive's standard terms and conditions of sale. MOMENTIVE MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY MOMENTIVE, except that the product shall conform to Momentive's specifications. Nothing contained herein constitutes an offer for the sale of any product.

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

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

\*Element14 is a trademark of Momentive Performance Materials Inc. Page 2 of 2