

### **Description:**

Apiezon Oil K is not vapor diffusion pump oils but is a lubricating oil intended for use in rotating gland seals and similar equipment where a good, moderately viscous oil and low vapor pressure are required. This oil is an excellent lubricant, as are the Apiezon greases.

Apiezon Oil K is extremely viscous with an estimated vapor pressure at 20 °C of 10<sup>-9</sup> to 10<sup>-10</sup> torr.

### **Specifications:**

<b><u>Oil K</u></b>	
Ultimate Pressure obtainable, torr	-
Average boiling point, °C at 1 torr	-
Specific gravity at 20 °C	0.919
Specific Gravity at 30 °C	0.914
Density g/mL at 10°C	0.921
Density g/mL at 20°C	0.916
Density g/mL at 30 °C	0.912
Density g/mL at 40 °C	0.904
Flash Point, Pensky-Martins, °F closed (ASTM D93 and IP 36/63, open fire)	645 660 >700
Viscosity, dynamic at 40 °C	5160
Pour Point, ASTM, °F (D97/66)	30
Coefficient of expansion per °C (a)	0.00062
Coefficient of expansion per °C (b)	0.00070
Average Molecular Weight	1355
Refractive Index at 20 °C (c)	
Thermal Conductivity w/m/ °C	0.169
Specific heat at 25 °, cal/g	0.46

(a) over 20 °C to 30 °C (ASTM D 1903/61T)

(b) over 10 °C to 40 °C

(c) ASTM D 1807-62T Sodium Line

### **Precautions:**

Apiezon products have been widely and safely used in vacuum distillation apparatus in both industry and laboratories for a number of years. As a result they should not present a health hazard assuming normal standards of industrial hygiene and safety are followed in their handling.

All Apiezon products are bases on petroleum products of a low order of acute toxicity. However, certain individual develop a rash after repeated contact. Therefore, it is recommended that gloves be worn to handle Apiezon. If Apiezon material is inadvertently in contact with the skin, wipe the area carefully, then cleanse thoroughly using a mild soap. Should any Apiezon products be heated for application, vent the fumes and avoid breathing the warm vapours. In terms of explosion and fire, Apiezon products are considered non-hazardous.