

Diffusion Pump Fluid

CHEMICAL NAME

1,1,5,5-Tetraphenyl-1,3,3,5-tetramethyltrisiloxane

CHEMICAL STRUCTURE

INTRODUCTION

SiSiB® PF8704 Silicone Diffusion Pump Fluid is a single component fluid designed for high vacuum applications in the range of 10⁻⁶ to 10⁻⁸ torr (untrapped) and 10⁻¹⁰ to 10⁻¹¹ torr (trapped).

Its low vapor pressure and thermal stability make it popular in processes such as vacuum coating, metallurgical work, and various other applications.

SiSiB® PF8704 is equal to DowCorning's DC-704, Shin-Etsu's HIVACF-4.

TYPICAL PHYSICAL PROPERTIES

CAS No.	3982-82-9
EINECS No.	223-620-5
Formula	$C_{28}H_{32}O_2Si_3$
Molecular Weight	484.82
Chemical Name	Tetramethyltetraphenyltrisiloxane
Color and Appearance	Colorless to straw-colored fluid

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SiSiB® PF8704

Diffusion Pump Fluid

Ultimate Vacuum, torr	10 ⁻⁷ to 10 ⁻⁸ untrapped
	10 ⁻¹⁰ to 10 ⁻¹¹ trapped
Extrapolated Vapor Pressure, torr, 25°C	2 x 10 ⁻⁸
Specific Gravity at 25°C	1.07
Refractive Index at 25°C	1.550~1.560
Viscosity at 25°C	36~44 cSt
Flash Point, open cup	221°C,
Boiling Point, 0.5 torr	215°C,
Typical Boiler Temperature	220°C,
Surface Tension, dynes/cm	37.3
Heat of Vaporization, kcal/g mol	25.5/250°C

APPLICATIONS

SiSiB® PF8704 Diffusion Pump Fluid can be used in a variety of applications including: Aerospace, Electronics, Metallurgy, Vacuum Coatings, and Atomic Energy etc.

PACKING AND STORAGE

SiSiB® PF8704 is supplied in 1Kg bottles, 5Kg 25Kg pails, and 200Kg steel drums.

In the original unopened packaging, SiSiB® PF8704 has a shelf life of 60 months.

Notes

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

We specifically disclaim any other express or implied warranty of fitness for a particular purpose or merchantability. We disclaim liability for any incidental or consequential damages.

Please send all technical questions concerning quality and product safety to: support@SiSiB.com.

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