

# TECHNICAL DATA



SPI Supplies  
206 Garfield Avenue,  
West Chester, PA 19380, USA

## Cargille™ Type 37 Immersion Oil: SPI Supplies #04092-AB

### Optical and physical properties

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Refractive Index @ 37° C:	
F Line (4861 Å)	1.5238
e Line (5461 Å)	1.5180
D Line (5893 Å)	1.5150
C Line (6563 Å)	1.5115
Dispersion:	
$n_F - n_C$ :	0.0123
Abbe $V_D$ :	42.0
Abbe $V_e$ :	41.7
Temperature Coefficient: (15-40°C)	
$dn_D/dt$	-0.00035 / +°C
Stability: (change in $n_D^{25°C}$ after 24 hrs. @ temp.)	
60°C:	0
100°C:	0
Fluorescence (1):	
Short Wave:	low
(Ultra-Violet)	
Long Wave:	low
Color: (Gardner)	1
Viscosity:(centistokes)	
CST $\pm$ 10% @ 37°C:	1250 (3800 cSt @ 23°C) high
Density: @ 23°C	
g/cc:	0.917
(US) lb/gal:	7.73
Cloud Point:	<-13°C
Flash Point: (Cleveland Open Cup)	325°F
Neutralization No.:	
(mg KOH/g)	0.01 max.

Immersion Oil Type 37 is useful for microscopic studies at body temperatures. Since the index/temperature relationship is inverse, increasing temperature significantly reduces the index of the immersion oil and consequently the imagery deteriorates. This problem has been resolved by the formulation of Cargille 37°C Immersion Oil.

Cargille Immersion Oil Type 37 has a refractive index (D line) of 1.515, and meets the DIN (Deutsches Institut Fur Normung e.v.) 58 884 specification in every respect except that it is calibrated at 37°C instead of 23°C. Viscosity at 37°C is 1250 centistokes.

**Date:** 9/22/2015