Supplementary Information for

Adsorption of Proteins to Thin-Films of PDMS and Its Effect on the Adhesion of Human Endothelial Cells

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**Molecular dimensions**

Molecular dimensions for the selected dimethylsiloxanes, as calculated using Jmol (an open-source Java viewer for chemical structures in 3D, http://www.jmol.org/). In both cases, the chlorine terminal atoms were exchanged for –OH, as expected to occur when substrates were rinsed with water.

![Image of molecular structure with dimensions](image)

**Nuclear magnetic Resonance**

Films produced by the deposition reaction of 1,7-dichloro-octamethyltetrasiloxane were characterized by variable angle spectroscopic ellipsometry, nuclear magnetic resonance (500 MHz $^1$H-NMR and $^{13}$C-NMR in CDCl$_3$), scanning electron microscopy (SEM), and atomic force microscopy (AFM). For comparison purposes, the $^1$H-NMR of 1,7-dichloro-octamethyltetrasiloxane was also obtained in CDCl$_3$. In order to analyze the reaction products, silica beads (>15 nm) were modified with 1,7-dichloro-octamethyltetrasiloxane, suspended in CDCl$_3$, and analyzed under conditions similar to those of the precursors in solution.
13C-NMR of silica beads (15 nm) modified with 1,7-dichloro-octamethyltetrasiloxane
$^{13}$C-NMR of silica beads (15 nm) modified with 1,7-dichloro-octamethyltetrasiloxane
\[ ^{13}\text{C-NMR of unmodified silica beads (15 nm)} \]
S-nano-1H

Archive directory: /export/home/vmmrl/vmmrsys/data
Sample directory: 
File: PROTON

Pulse Sequence: s2pul
Solvent: CDC13
Ambient temperature
INOVA-500 "Inova500"

Relax. delay 1.000 sec
Pulse 24.5 degrees
Acq. time 1.892 sec
Width 7445.2 Hz
32 repetitions

DBERVE H1, 499.600517 MHz
DATA PROCESSING
FT size 32768
Total time 1 min, 32 sec

1H-NMR of silica beads (15 nm) modified with 1,7-dichloro-octamethyltetrasiloxane

0.055 ppm

4.843 ppm

1.570 ppm
$\text{^{1}H-NMR of unmodified silica beads (15 nm)}$

\begin{verbatim}
STANDARD PROTON PARAMETERS
Archive directory: /expct/home/vnmri/vnmrsys/data
Sample directory:
File: PROTON
Pulse Sequence: s2pu
Solvent: CD3OD
Ambient temperature
INova-500 *"inova500"

Relax. delay 1.300 sec
Pulse 24.5 degrees
Acq. time 1.882 sec
Width 7385.7 Hz
256 repetitions
Observe H1, 499.5005456 MHz
DATA PROCESSING
T1 size 32768
Total time 32 min, 28 sec
\end{verbatim}