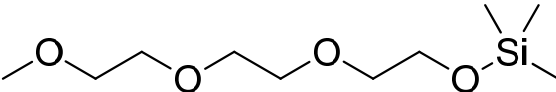


|                     |  |
|---------------------|--|
| <b>Description</b>  | 2,2-dimethyl-3,6,9,12-tetraoxa-2-silatrundecane                                    |
| <b>CAS #</b>        | 864079-62-9  |
| <b>Formula</b>      | C <sub>10</sub> H <sub>24</sub> O <sub>4</sub> Si                                  |
| <b>FW</b>           | 236.38   |
| <b>LOT #</b>        | TD1-181  |
| <b>Purity</b>       | >99.95% <sup>1</sup>   |
| <b>Batch Size</b>   | 3357 g   |
| <b>Manufactured</b> | 5/17/2011  |
| <b>Structure</b>    |  |

| Analysis                     | Method  | Results                   | Analysis By: |
|------------------------------|---|---------------------------|--------------|
| <b>GC/MSD</b>                | Agilent HP-5MS, 0.25 um, 30m x 0.250 mm, 30 deg/min | >99.95% <sup>1,2</sup>    | T. Dzwiniel  |
| <b>Boiling Point</b>         | Automatic, range method (Buchi M-565)               | 233-234°C                 | T. Dzwiniel  |
| <b>Flash Point</b>           | Pensky-Martens Closed Cup                           | 112.5°C                   | Intertek     |
| <b>KF Moisture Titration</b> | Coulometric (KEM MCU-610)                           | 26 ppm                    | T. Dzwiniel  |
| <b>FTIR</b>                  | Bruker Vertex 70, Attenuated Total Reflection       | Consistent with Structure | S. Gallagher |
| <b>NMR</b>                   | Bruker 500 MHz, CDCl <sub>3</sub> solution.         | Consistent with Structure | K. Pupek     |

<sup>1</sup> By area integration, this value was 100%. No impurity peaks were identified above baseline noise.

<sup>2</sup> Average from three analyses.

| Properties  | Value |
|---|-------|
| <b>Dielectric Constant</b>                              | 5.13  |
| <b>Viscosity (cP, @25°C)</b>                            | 1.4   |
| <b>Lithium Salt Solubility (M, as LiPF<sub>6</sub>)</b> | 1.4   |
| <b>Ionic Conductivity (10<sup>-3</sup>S/cm @ 25°C)</b>  | 1.9   |
| <b>Voltage Stability (Oxidation, V)</b>                 | 4.7   |