

# SILICYCLE<sup>®</sup> SPECIFICATION SHEET

## SiliaBond<sup>®</sup> C1



**PRODUCT NUMBER: R33030B**  
**PARTICLE SHAPE: Irregular Silica Gel**

### COMPANY IDENTIFICATION

**SiliCycle Inc**, [www.silicycle.com](http://www.silicycle.com)  
 2500 Parc-Technologique Blvd  
 Quebec City (QC) G1P 4S6  
 CANADA

**PHONE:** 1 418.874.0054  
**TOOL FREE:** 1 877.745.4292 (North America Only)  
**FAX:** 1 418.874.0355  
**HOURS:** Monday-Friday 8:00 a.m.-5:00 p.m. (EST)

| Properties                                     | Specifications                                  | Analysis Methods                                  |
|--|---|---|
| <b>BARE SILICA SPECIFICATIONS</b>              |   |   |
| Particle Size Distribution (µm)                | 40 - 63   | Laser Diffraction                                 |
| Pore Diameter (Å, BJH)                         | 60  | Nitrogen Adsorption /<br>Desorption Method at 77K |
| Specific Surface Area (m <sup>2</sup> /g, BET) | 470 - 530                                       |   |
| Specific Pore Volume (mL/g, BJH)               | 0.70 - 0.85                                     |   |
| <b>FUNCTIONALIZED SILICA SPECIFICATIONS</b>    |   |   |
| Color  | White Powder                                    | Visual Test                                       |
| Chemical Structure                             | Peaks at 1470, 2850,<br>& 2930 cm <sup>-1</sup> | FTIR  |
| Carbon Content (%)                             | ≥ 4.17  | CHNS Analyser                                     |
| Molecular Loading (mmol/g)                     | ≥ 1.16  | Based on Carbon Content                           |
| Surface Coverage (µmol/m <sup>2</sup> )        | ≥ 2.53  | Based on Molecular Loading                        |
| Endcapping                                     | -   | -   |
| Purity (%)                                     | ≥ 99.95   | GC-MS   |
| Volatile Content (%, 110°C)                    | ≤ 4.00  | Moisture Balance                                  |

**Revision Date: 2008/11/24**

**Version: 1,1**