

### Chemical Information:

Name: 1-Butene, 3,4-dichloro-  
CAS No.: 760-23-6  
Tox21\_ID No.: Tox21\_201361  
NTP\_CID No.: 2388

Date of Analysis: 29 July 2009

Supplier: Sigma-Aldrich  
Lot No.: 02918HU  
MW: 125.00 g/mol

### Purity and Identity Results:

| Peak Identity           | Retention Time (min) | Purity (% Total Area) <sup>a</sup> |
|-------------------------|----------------------|------------------------------------|
| 1-Butene, 3,4-dichloro- | 4.24                 | 100.00                             |

<sup>a</sup> Peaks comprising  $\geq 0.5\%$  of total area.

### GC/MS Instrument Parameters:

|                         |                                                                              |
|-------------------------|------------------------------------------------------------------------------|
| Instrument / Ionization | Gas Chromatograph with Mass Spectrometer / Electron Impact                   |
| Solvent                 | Ethanol (~ 400 $\mu\text{g/mL}$ )                                            |
| Column                  | J&W Scientific HP-5MS, 30 m x 0.25 mm ID, 0.25- $\mu\text{m}$ film thickness |
| Carrier Gas             | Helium at 1.0 mL/min                                                         |
| Oven Program            | 35°C, hold 2 min; ramp @ 10°C/min to 310°C, hold 7 min                       |
| Source Temperature      | 250°C                                                                        |
| Auxiliary Temperature   | 250°C                                                                        |
| Scan Range              | 25 – 500 amu                                                                 |
| Injector Temperature    | 250°C                                                                        |
| Injection Volume / Mode | 1 $\mu\text{L}$ / Split (100:1)                                              |
| Run Time                | 36.5 minutes                                                                 |
| Data Analysis Software  | Xcalibur, ver 1.2 and NIST Library ver 2.0f, build 10/08/2008                |

