

**Chemical Information:**

Name: 2-Chlorobutane  
CAS No.: 78-86-4  
Tox21\_ID No.: Tox21\_200404  
NTP\_CID No.: 2134

Supplier: Sigma-Aldrich  
Lot No.: 14803PS  
MW: 92.57 g/mol

Date of Analysis: 03 August 2009

**Purity and Identity Results:**

Peak Identity	Retention Time (min)	Purity (% Total Area) <sup>a</sup>
2-Chlorobutane	3.21	98.64
unknown	27.99	0.72

<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	Not applicable, analyzed as neat chemical
Column	J&W Scientific HP-5MS, 30 m x 0.25 mm ID, 0.25- $\mu$ 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 $\mu$ L / Split (500:1)
Run Time	36.5 minutes
Data Analysis Software	Xcalibur, ver 1.2 and NIST Library ver 2.0f, build 10/08/2008

