

Chemical Information:

Name: 2,2-Dimethylbutane

Date of Analysis: 14 October 2009

CAS No.: 75-83-2

Supplier: Sigma-Aldrich

Tox21_ID No.: Tox21_200358

Lot No.: 12003KO

NTP_CID No.: 114

MW: 86.18 g/mol

Purity and Identity Results:

Peak Identity	Retention Time (min)	Purity (% Total Area) ^a
2,2-Dimethylbutane	2.11	98.94
unknown	3.39	0.87

^a Peaks comprising $\geq 0.5\%$ of total area.

GC/MS Instrument Parameters:

Instrument / Ionization	Gas Chromatograph with Mass Spectrometer / Electron Impact
Solvent	Not applicable; neat chemical
Column	J&W Scientific HP-5MS, 30 m x 0.25 mm ID, 0.25- μ m film thickness
Carrier Gas	Helium at 1.0 mL/min
Oven Program	10°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 μ L / Split (480:1)
Data Analysis Software	Xcalibur, ver 1.2 and NIST Library ver 2.0f, build 10/08/2008

