

Chemical Information:

Name: Phosphonic acid, dibutyl ester
CAS No.: 1809-19-4 Supplier: Sigma Aldrich
Tox21_ID No.: Tox21_201976 Lot No.: 06518PC
NTP_CID No.: 2984 MW: 194.21 g/mol

Date of Analysis: 04 October 2016

Purity and Identity Results:

Peak Identity	Retention Time (min)	Purity (% Total Area) ^a
Acetone	2.00	Not applicable
Phosphonic acid, dibutyl ester	23.77	99.75

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

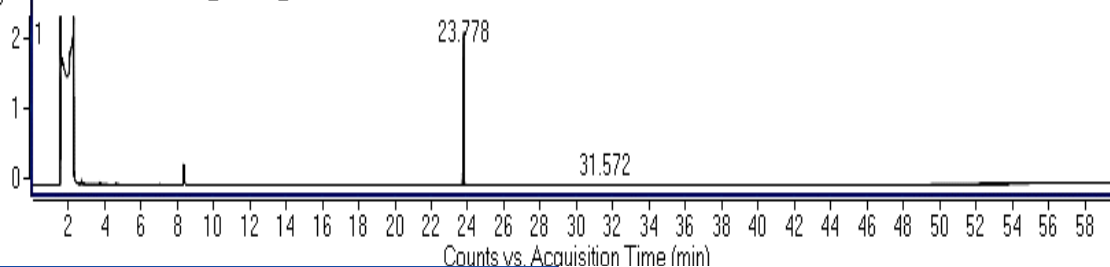
GC/MS Instrument Parameters:

Instrument / Ionization	Gas Chromatograph with Mass Spectrometer / Electron Impact
Solvent	Acetone (~ 100 µg/mL)
Column	Restek Rtx-5MS with Integra-Guard, 30 m x 0.25 mm ID, 1-µm film thickness
Carrier Gas	Helium at 1.5 mL/min
Oven Program	50°C, hold 2 min; ramp @ 5°C/min to 315°C, hold 5 min
Source Temperature	230°C
Auxiliary Temperature	250°C
Scan Range	40 – 475 amu
Injector Temperature	250°C
Injection Volume / Mode	1 µL / Splitless
Data Analysis Software	MassHunter GC/MS Acquisition B.07.02.1938 / MassHunter Qualitative Analysis B.07.00 Build 7.0.7024.0 / NIST Library Version 2.2 Build 2014

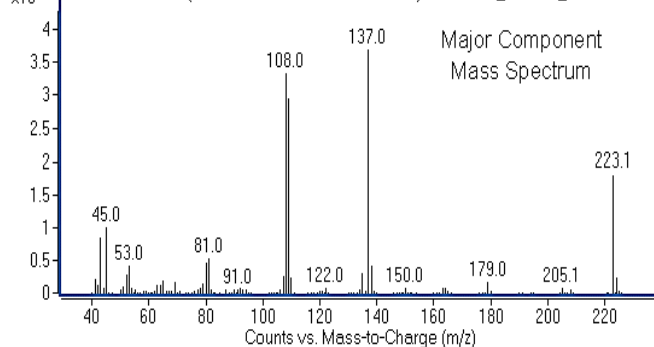
x10⁷ + TIC Scan 20161004_MSD11_003.D



x10⁷ + TIC Scan 20161004_MSD11_056.D



x10⁵ Bucetin: + Scan (rt: 39.965-40.226 min, 53 scans) 20161004_MSD11_045.D



NIST Reference Mass Spectrum

