

Chemical Information:

Name: Morpholine, 4-methyl-
CAS No.: 109-02-4
Tox21_ID No.: Tox21_202412
NTP_CID No.: 3591

Supplier: Sigma Aldrich
Lot No.: 01524AH
MW: 101.15 g/mol

Date of Analysis: 03 November 2016

Purity and Identity Results:

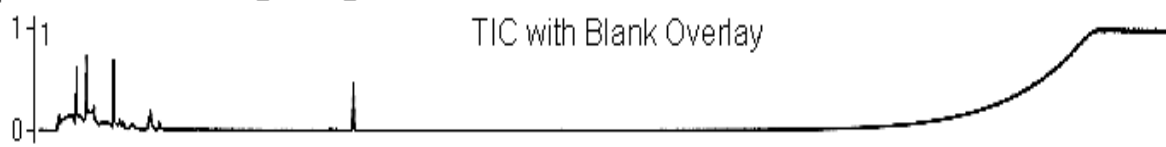
Peak Identity	Retention Time (min)	Purity (% Total Area) ^a
Morpholine, 4-methyl-	6.76	100.00

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

GC/MS Instrument Parameters:

Instrument / Ionization	Gas Chromatograph with Mass Spectrometer / Electron Impact
Solvent	Methanol
Column	Restek Rtx-5MS with Integra-Guard, 30 m x 0.25 mm ID, 1- μ m 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 – 470 amu
Injector Temperature	250°C
Injection Volume / Mode	1 μ L / 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

x10² + TIC Scan 20161103_MSD11_003.D



x10² + TIC Scan 20161103_MSD11_006.D



Counts (%) vs. Acquisition Time (min)

