

Chemical Information:

Name: Dinitrosopiperazine

Date of Analysis: 21 March 2017

CAS No.: 140-79-4

Supplier: Toronto Research Chemicals Inc.

Tox21_ID No.: Tox21_202782

Lot No.: 4-RFS-8-2

NTP_CID No.: 4266

MW: 144.13 g/mol

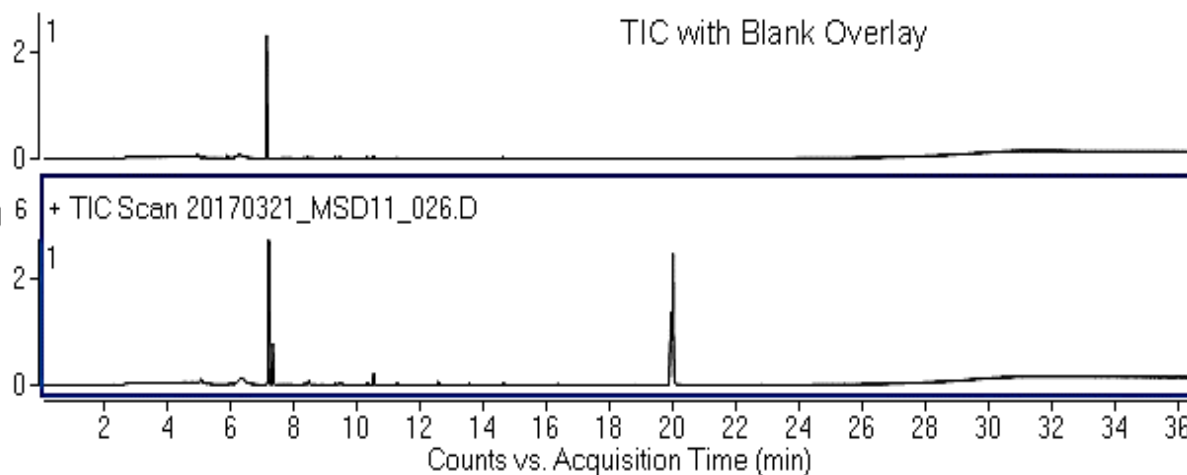
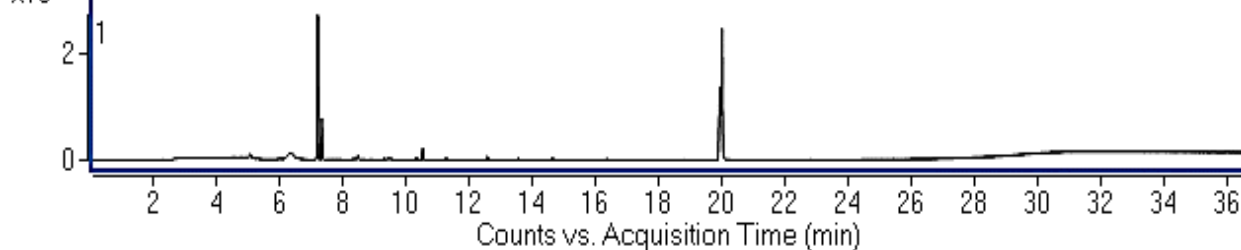
Purity and Identity Results:

Peak Identity	Retention Time (min)	Purity (% Total Area) ^a
Dinitrosopiperazine	19.99	100.00

^a Peaks comprising ≥ 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-µm 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	40 – 550 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

x10⁶ + TIC Scan 20170321_MSD11_010.D

x10⁶ + TIC Scan 20170321_MSD11_026.D

x10⁵ Piperazine, 1,4-dinitroso- + Scan (rt: 19.946, 19.952, 19.958, 19.963 ... min, 12 scans) 201...
