

Chemical Information:

Name: Dimenhydrinate
CAS No.: 523-87-5
Tox21_ID No.: Tox21_200323
NTP_CID No.: 738

Supplier: Sigma-Aldrich
Lot No.: 064H0480
MW: 469.96 g/mol

Date of Analysis: 19 May 2010

Purity and Identity Results:

Peak Identity	Retention Time (min)	Purity (% Total Area) ^a
Diphenhydramine	19.93	71.65
8-Chlorotheophylline	21.30	25.66
Unknown	27.59	0.81
Unknown	27.63	1.03
Unknown	27.60	0.51

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

Note: Dimenhydrinate is a drug combination containing diphenhydramine and 8-chlorotheophylline.

GC/MS Instrument Parameters:

Instrument / Ionization	Gas Chromatograph with Mass Spectrometer / Electron Impact
Solvent	Dichloromethane
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	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	15 – 500 amu
Injector Temperature	250°C
Injection Volume / Mode	1 μ L / Split (100:1)
Data Analysis Software	Xcalibur, v 1.2 and NIST Library v 2.0f, build 10/08/2008

