

Chemical Information:

Name: Permethrin
 CAS No.: 52645-53-1
 Tox21_ID No.: Tox21_201586
 NTP_CID No.: 2081

Supplier: Chem Service, Inc.
 Lot No.: 425-24A
 MW: 391.29 g/mol

Date of Analysis: 31 March 2010

Purity and Identity Results:

Peak Identity	Retention Time (min)	Purity (% Total Area) ^a
Permethrin	27.28	28.70
Permethrin	27.40	71.30

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

Note: Per CoA, chemical is a mixture of isomers: 46.1% cis and 53.2% trans. Unable to distinguish isomers based on mass spectra.

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	230°C
Auxiliary Temperature	250°C
Scan Range	25 – 500 amu
Injector Temperature	250°C
Injection Volume / Mode	1 μ L / Split (100:1)
Data Analysis Software	MSD Chemstation, v D.03.00.SP1 and NIST Library v 2.0f, build 10/8/2008

