

Chemical Information:

Name: Chlordane (technical grade)
CAS No.: 12789-03-6
Tox21_ID No.: Tox21_200290
NTP_CID No.: 611

Date of Analysis: 05 November 2009

Supplier: Sigma-Aldrich
Lot No.: 8248X
MW: 409.78 g/mol

Purity and Identity Results:

Peak Identity ^a	Retention Time (min)	Purity (% Total Area) ^b	Peak Identity ^a	Retention Time (min)	Purity (% Total Area) ^b
Chlordane-related	21.32	2.86 ^c	Chlordane	22.94	19.94 ^c
Chlordane-related	21.37	0.70 ^c	Unknown	23.82	1.62
Unknown	22.39	0.65	trans-Nonachlor	24.13	2.38 ^c
Chlordane	22.56	23.35 ^c	Chlordane-related	24.31	4.34 ^c
Chlordane	22.85	42.91 ^c	Chlordane-related	24.96	1.25 ^c

^a Chlordane is a mixture containing structurally-related compounds and trans-nonachlor as components.

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

^c Included in purity calculation; total purity = 97.73%.

GC/MS Instrument Parameters:

Instrument / Ionization	Gas Chromatograph with Mass Spectrometer / Electron Impact
Solvent	Dichloromethane (~ 1 mg/mL)
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	150°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; NIST Library v 2.0f, build 10/08/2008

