

Chemical Information:

Name: 2,4-D, isooctyl ester
 CAS No.: 25168-26-7
 Tox21_ID No.: Tox21_200926
 NTP_CID No.: 158

Date of Analysis: 22 February 2010

Supplier: Chem Service
 Lot No.: 311-25A
 MW: 333.25 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
unknown	22.60	0.56	1928-43-4	23.56	12.85
1928-43-4	22.89	10.41	25168-26-7	23.72	32.26
25168-26-7	23.22	30.29	25168-26-7	23.80	6.56
25168-26-7	23.29	4.36	1928-43-4	24.02	1.25

^a Per CoA, 98% as mix of isomers; analysis detected multiple unresolved components between 22.5 and 24.5 minutes. Mass spectra were consistent with CAS# 25168-26-7 (2,4-D, isooctyl ester) and CAS# 1928-43-4 (2,4-D, 2-ethylhexyl ester), indicating a mix of isomers. Total = 97.98%

^b Peaks comprising ≥ 0.5% of total area.

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-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	230°C
Auxiliary Temperature	250°C
Scan Range	25 – 500 amu
Injector Temperature	250°C
Injection Volume / Mode	1 μL / Splitless
Data Analysis Software	MSD ChemStation v D.03.00.SP1, and NIST Library v 2.0f, build 10/8/2008

