

Chemical Information:

Name: Isodecyl methacrylate
 CAS No.: 29964-84-9 Supplier: Sigma-Aldrich
 Tox21_ID No.: Tox21_200421 Lot No.: 10128CD
 NTP_CID No.: 2481 MW: 226.36 g/mol

Date of Analysis: 23 December 2009

Purity and Identity Results:

Peak Identity	Retention Time (min)	Purity (% Total Area) ^a	Peak Identity	Retention Time (min)	Purity (% Total Area) ^a
unknown	14.67	1.79	unknown ^b	15.85	7.48
unknown	14.80	1.12	29964-84-9	15.92	2.72
unknown	15.00	1.13	29964-84-9	15.99	2.43
unknown	15.11	3.87	29964-84-9	16.08	2.35
unknown	15.19	1.21	3179-47-3 ^d	16.14	7.72
unknown	15.22	0.64	unknown	16.18	4.33
unknown ^b	15.38	5.56	3179-47-3	16.22	1.66
29964-84-9 ^c	15.43	9.10	3179-47-3	16.30	1.78
29964-84-9	15.48	3.32	29964-84-9	16.37	1.28
29964-84-9	15.61	17.26	unknown	16.47	1.10
29964-84-9	15.70	19.30	unknown	16.72	0.60

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

^b Component was not identified; based on spectrum may be structurally related to 29964-84-9.

^c CAS# 29964-84-9: isodecyl methacrylate (synonym, 2-propenoic acid, 2-methyl-, isodecyl ester).

^d CAS# 3179-47-3: 2-propenoic acid, 2-methyl-, decyl ester.

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

