

Chemical Information:

Name: Creosote, wood
CAS No.: 8021-39-4
Tox21_ID No.: Tox21_201136
NTP_CID No.: 651

Supplier: Sigma-Aldrich
Lot No.: 1383113
MW: Not applicable

Date of Analysis: 03 February 2010

Purity and Identity Results:

Peak Identity ^a	Retention Time (min)	Purity (% Total Area) ^b	Peak Identity ^a	Retention Time (min)	Purity (% Total Area) ^b
Phenol	7.92	6.10	Unknown	10.97	2.19
o-Cresol	9.17	5.62	Unknown	11.19	1.38
p-Cresol	9.49	10.93	Phenol, 2-methoxy-4-methyl-	11.40	30.89
Phenol, 2-methoxy-	9.78	26.08	Phenol, 2-methoxy-4-ethyl-	12.67	10.10
2,4-Xylenol	10.66	6.72			

^a Creosote is a mixture of various components, primarily phenol and substituted phenols. Identified components are related to phenol and total 96.44%.

^b Peaks comprising $\geq 0.5\%$ 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- 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	25 – 500 amu
Injector Temperature	250°C
Injection Volume / Mode	1 μ L / Split (100:1)
Data Analysis Software	Xcalibur ver 1.2, and NIST Library ver 2.0f, build 10/08/2008

