separations

Supplementary Materials

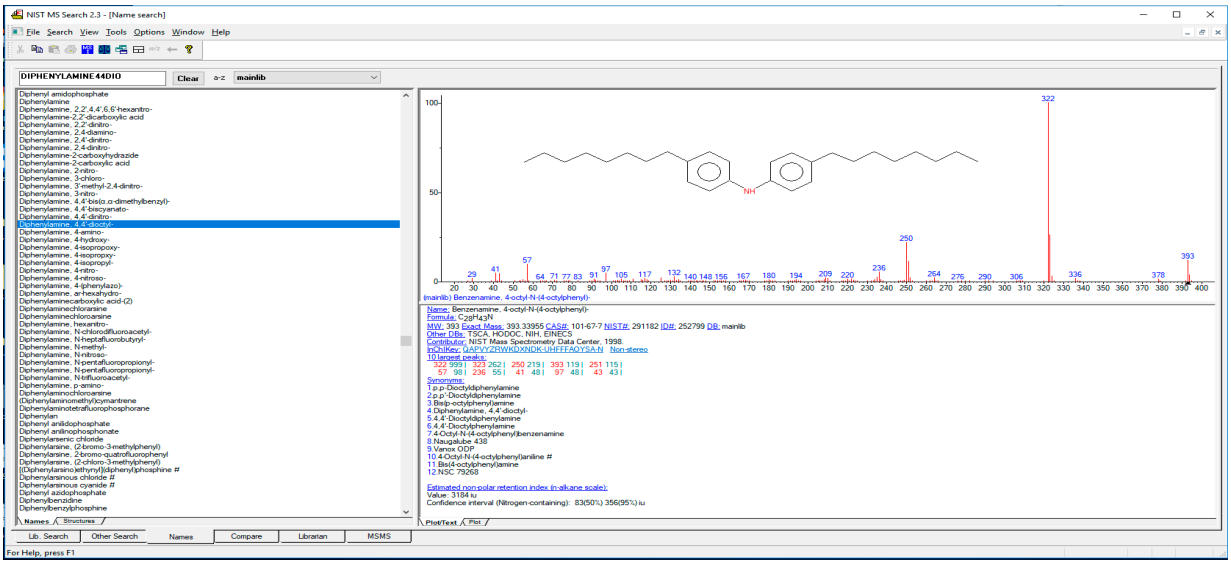
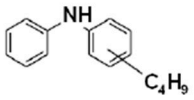
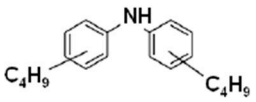
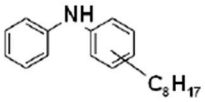
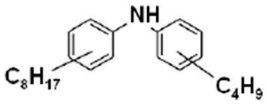
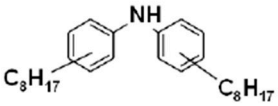
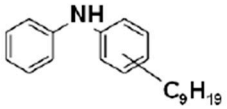
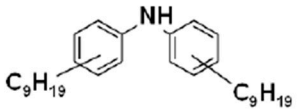
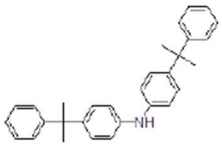
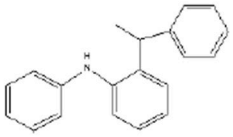


Figure S1. Mass spectrum of dioctyl-substituted diphenylamine within the NIST library.

Table S1. Chemical name, structure and multiple reaction monitoring (MRM) transitions (Reprinted with permission from ref. [34]. Copyright (2016) American Chemical Society).

Analyte	Structure	MRM Transitions (*quantifier)
Monobutyl Diphenylamine (C4)		226→134* 226→106 226→93
Dibutyl Diphenylamine (C4C4)		282→134* 282→106 282→93
Monooctyl Diphenylamine (C8)		282→134* 282→106 282→93
Monobutyl monooctyl Diphenylamine (C4C8)		338→134* 338→94 338→106
Dioctyl Diphenylamine (C8C8)		394→134* 394→106 394→93
Monononyl Diphenylamine (C9)		296→134* 296→106 296→210
Dinonyl Diphenylamine (C9C9)		422→336 422→148 422→106 422→134*
Dimethyl-distyrenated Diphenylamine (diAMS)		406→196* 406→119 406→103
Monostyrenated Diphenylamine MS (two isomers)		274→182*(peak 1) 274→180*(peak 2) 274→105