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Research paper

The Effect of Humidity on Detection of TNT Vapor by Differential Ion Mobility Spectrometry (DMS)

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Table 1S. HSV asymmetric voltage and average TNT signal amplitude for a given relative air humidity

Air humidity [%]	Average amplitude of the signal in negative polarization for asymmetric tension HSV (in V) of									
	305	320	340	355	370	400	425	450	475	520
15	1735	1650	1578	1528	1450	1427	1501	1355	1280	1275
20	1804	1696	1601	1627	1597	1549	1543	1447	1379	1255
30	1838	1807	1864	1777	1697	1613	1588	1497	1441	1396
40	2011	1925	1883	1811	1815	1714	1639	–	–	–
50	2022	1958	1903	1842	1791	1708	1621	1534	1477	1376
60	2079	2009	1919	1875	1833	1732	1664	1572	1499	1370
70	2094	2034	1945	1899	1844	1716	1652	1572	1493	1356
80	2072	2037	1930	1869	1826	1705	1616	–	–	–

Table 2S. HSV asymmetric voltage and average TNT signal amplitude for a given relative air humidity using a semi-permeable membrane

Air humidity [%]	Average amplitude of the signal in negative polarization for asymmetric tension HSV (in V) of									
	350	360	400	420	450	470	490	520	580	600
2	–	241	202	193	180	173	166	148	127	154
20	–	533	495	491	469	439	440	419	–	–
30	–	837	750	728	698	705	678	643	–	–
40	–	975	916	897	865	851	826	796	–	–
50	–	1124	1058	1048	1002	986	961	918	–	–
60	1260	1208	1136	1110	1072	1050	1019	991	–	882
70	1290	1263	1198	1161	1113	1095	1062	1021	–	921
80	1337	1324	1240	1188	1172	1147	1105	1093	–	–

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