

Supplementary File for

Destanoğlu O, Ateş İ. Determination and Evaluation of Methanol, Ethanol and Higher Alcohols in Legally and Illegally Produced Alcoholic Beverages. JOTCSA. 2019; 6(1): 21-28.

Table S1: The results of the Turkish rakı samples.

| No | EtOH | | MeOH | | g/hL (Codex Limit) | tert-butanol (2-methyl-2-propanol) | n-propanol | isoamyl alcohol (3-methyl-1-butanol) | Isobutanol (2-methyl-1-propanol) | n-butanol | Ethyl Acetate | Anethole |
|----|-------------------|------|-------------------|------------------------|--------------------|------------------------------------|------------|--------------------------------------|----------------------------------|-----------|---------------|----------|
| | mg/dL (in sample) | % | mg/dL (in sample) | g/hL (in 100% Alcohol) | | | | | | | | |
| 1 | 37552 | 47.6 | 3 | 6 | 150 | ✓ | | | | | | ✓ |
| 2 | 34600 | 43.9 | 16 | 36 | 150 | | ✓ | ✓ | ✓ | | ✓ | ✓ |
| 3 | 34142 | 43.3 | 21 | 48 | 150 | | ✓ | ✓ | ✓ | | | ✓ |
| 4 | 40855 | 51.8 | 26 | 50 | 150 | | ✓ | ✓ | ✓ | | | ✓ |
| 5 | 33815 | 42.9 | 27 | 63 | 150 | | ✓ | ✓ | ✓ | | ✓ | ✓ |
| 6 | 40295 | 51.1 | 29 | 57 | 150 | | ✓ | ✓ | ✓ | ✓ | | ✓ |
| 7 | 37089 | 47.0 | 37 | 79 | 150 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8 | 39520 | 50.1 | 37 | 74 | 150 | ✓ | ✓ | | | | ✓ | ✓ |
| 9 | 35530 | 45.0 | 81 | 179 | 150 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10 | 37868 | 48.0 | 485 | 998 | 150 | ✓ | | | | | | ✓ |
| 11 | 36864 | 46.7 | 499 | 1054 | 150 | ✓ | | | | | | ✓ |
| 12 | 26244 | 33.3 | 8492 | 19307 | 150 | | | | | | ✓ | ✓ |
| 13 | 35612 | 45.1 | 8604 | 15364 | 150 | | | | | | | ✓ |
| 14 | 36636 | 46.4 | 8723 | 15184 | 150 | | | | | | | ✓ |
| 15 | 22066 | 28.0 | 13316 | 29736 | 150 | | | | | | | ✓ |
| 16 | 25120 | 31.8 | 15993 | 30737 | 150 | | | | | | | ✓ |
| 17 | 33070 | 41.9 | | | | ✓ | | | | | | ✓ |
| 18 | 34824 | 44.1 | | | | ✓ | | | | | | ✓ |
| 19 | 34973 | 44.3 | | | | ✓ | | | | | | ✓ |
| 20 | 35620 | 45.1 | | | | ✓ | | | | | | ✓ |
| 21 | 36652 | 46.5 | | | | ✓ | | | ✓ | | ✓ | ✓ |
| 22 | 36690 | 46.5 | | | | ✓ | | | | | | ✓ |
| 23 | 36850 | 46.7 | | | | ✓ | | | | | | ✓ |
| 24 | 36941 | 46.8 | | | | ✓ | | | | | | ✓ |
| 25 | 37383 | 47.4 | | | | ✓ | | | | | | ✓ |
| 26 | 37747 | 47.8 | | | | ✓ | | | | | | ✓ |
| 27 | 37875 | 48.0 | | | | ✓ | | | | | | ✓ |

| No | EtOH | | MeOH | | | tert-butanol (2-methyl- 2-propanol) | n- propanol | isoamyl alcohol (3- methyl-1- butanol) | Isobutanol (2-methyl- 1- propanol) | n- butanol | Ethyl Acetate | Anethole |
|----|-------------------------|------|----------------------|------------------------------|--------------------------|---|----------------|---|---|---------------|------------------|----------|
| | mg/dL (in sample) | % | mg/dL (in sample) | g/hL (in 100% Alcohol) | g/hL (Codex Limit) | | | | | | | |
| 28 | 37939 | 48.1 | | | | ✓ | | | | | | ✓ |
| 29 | 37973 | 48.1 | | | | ✓ | | | | | | ✓ |
| 30 | 38153 | 48.4 | | | | ✓ | | | | | | ✓ |
| 31 | 38219 | 48.4 | | | | ✓ | | | | | | ✓ |
| 32 | 38237 | 48.5 | | | | ✓ | | | | | | ✓ |
| 33 | 38246 | 48.5 | | | | ✓ | | | | | | ✓ |
| 34 | 38399 | 48.7 | | | | ✓ | | | | | | ✓ |
| 35 | 38586 | 48.9 | | | | ✓ | | | | | | ✓ |
| 36 | 38603 | 48.9 | | | | ✓ | | | | | | ✓ |
| 37 | 38814 | 49.2 | | | | ✓ | | | | | | ✓ |
| 38 | 38863 | 49.3 | | | | ✓ | | | | | | ✓ |
| 39 | 38994 | 49.4 | | | | ✓ | | | | | | ✓ |
| 40 | 39025 | 49.5 | | | | ✓ | | | | | | ✓ |
| 41 | 39026 | 49.5 | | | | ✓ | | | | | | ✓ |
| 42 | 39112 | 49.6 | | | | ✓ | | | | | | ✓ |
| 43 | 39196 | 49.7 | | | | ✓ | | | | | | ✓ |
| 44 | 39320 | 49.8 | | | | ✓ | | | | | | ✓ |
| 45 | 39370 | 49.9 | | | | ✓ | | | | | | ✓ |
| 46 | 39439 | 50.0 | | | | ✓ | | | | | | ✓ |
| 47 | 39475 | 50.0 | | | | ✓ | | | | | | ✓ |
| 48 | 39496 | 50.1 | | | | ✓ | | | | | | ✓ |
| 49 | 39513 | 50.1 | | | | ✓ | | | | | | ✓ |
| 50 | 39545 | 50.1 | | | | ✓ | | | | | | ✓ |
| 51 | 39630 | 50.2 | | | | ✓ | | | | | | ✓ |
| 52 | 39700 | 50.3 | | | | ✓ | | | | | | ✓ |
| 53 | 39714 | 50.3 | | | | ✓ | | | | | | ✓ |
| 54 | 39804 | 50.4 | | | | ✓ | | | | | | ✓ |
| 55 | 39846 | 50.5 | | | | ✓ | | | | | | ✓ |
| 56 | 39965 | 50.7 | | | | ✓ | | | | | | ✓ |
| 57 | 40042 | 50.8 | | | | ✓ | | | | | | ✓ |
| 58 | 40063 | 50.8 | | | | ✓ | | | | | | ✓ |
| 59 | 40148 | 50.9 | | | | ✓ | | | | | | ✓ |
| 60 | 40168 | 50.9 | | | | ✓ | | | | | | ✓ |

| No | EtOH | | MeOH | | | | | | | | | |
|----|-------------------|------|-------------------|------------------------|--------------------|------------------------------------|------------|--------------------------------------|----------------------------------|-----------|---------------|----------|
| | mg/dL (in sample) | % | mg/dL (in sample) | g/hL (in 100% Alcohol) | g/hL (Codex Limit) | tert-butanol (2-methyl-2-propanol) | n-propanol | isoamyl alcohol (3-methyl-1-butanol) | Isobutanol (2-methyl-1-propanol) | n-butanol | Ethyl Acetate | Anethole |
| 61 | 40240 | 51.0 | | | | ✓ | | | | | | ✓ |
| 62 | 40271 | 51.0 | | | | ✓ | | | | | | ✓ |
| 63 | 40359 | 51.2 | | | | ✓ | | | | | | ✓ |
| 64 | 40401 | 51.2 | | | | ✓ | | | | | | ✓ |
| 65 | 40405 | 51.2 | | | | ✓ | | | | | | ✓ |
| 66 | 40609 | 51.5 | | | | ✓ | | | | | | ✓ |
| 67 | 40631 | 51.5 | | | | ✓ | | | | | | ✓ |
| 68 | 40654 | 51.5 | | | | ✓ | | | | | | ✓ |
| 69 | 40691 | 51.6 | | | | ✓ | | | | | | ✓ |
| 70 | 40856 | 51.8 | | | | ✓ | | | | ✓ | | ✓ |
| 71 | 41003 | 52.0 | | | | ✓ | | | | | | ✓ |
| 72 | 41069 | 52.1 | | | | ✓ | | | | ✓ | | ✓ |
| 73 | 41124 | 52.1 | | | | ✓ | | | | | | ✓ |
| 74 | 41160 | 52.2 | | | | ✓ | | | | | | ✓ |
| 75 | 41217 | 52.2 | | | | ✓ | | | | | | ✓ |
| 76 | 41254 | 52.3 | | | | ✓ | | | | | | ✓ |
| 77 | 41386 | 52.5 | | | | ✓ | | | | | | ✓ |
| 78 | 41443 | 52.5 | | | | ✓ | | | | | | ✓ |
| 79 | 41459 | 52.5 | | | | ✓ | | | | | | ✓ |
| 80 | 41481 | 52.6 | | | | ✓ | | | | | | ✓ |
| 81 | 41730 | 52.9 | | | | ✓ | | | | | | ✓ |
| 82 | 41737 | 52.9 | | | | ✓ | | | | | | ✓ |
| 83 | 41884 | 53.1 | | | | ✓ | | | | | | ✓ |
| 84 | 42205 | 53.5 | | | | ✓ | | | | | | ✓ |
| 85 | 42284 | 53.6 | | | | ✓ | | | | | | ✓ |
| 86 | 42481 | 53.8 | | | | ✓ | | | | | | ✓ |
| 87 | 42831 | 54.3 | | | | ✓ | | | | | | ✓ |
| 88 | 42979 | 54.5 | | | | ✓ | | | | | | ✓ |
| 89 | 43026 | 54.5 | | | | ✓ | | | | | | ✓ |
| 90 | 43872 | 55.6 | | | | ✓ | | | | | | ✓ |
| 91 | 44645 | 56.6 | | | | ✓ | | | | | | ✓ |
| 92 | 44861 | 56.9 | | | | ✓ | | | | | | ✓ |
| 93 | 44913 | 56.9 | | | | ✓ | | | | | | ✓ |

| No | EtOH | | MeOH | | tert-butanol (2-methyl- 2-propanol) | n- propanol | isoamyl alcohol (3- methyl-1- butanol) | Isobutanol (2-methyl- 1- propanol) | n- butanol | Ethyl Acetate | Anethole |
|----|-------------------------|------|----------------------|------------------------------|---|----------------|---|---|---------------|------------------|----------|
| | mg/dL (in sample) | % | mg/dL (in sample) | g/hL (in 100% Alcohol) | | | | | | | |
| 94 | 45705 | 57.9 | | | ✓ | | | | | | ✓ |
| 95 | 46015 | 58.3 | | | ✓ | | | | | | ✓ |
| 96 | 51399 | 65.1 | | | ✓ | | | | ✓ | | ✓ |

Table S2: The results of beer and wine samples.

| Sample | EtOH | | MeOH | | tert-butanol | n-propanol | isoamyl alkol | isobutanol | n-butanol | Ethyl Acetate | Anethole |
|-------------|-------|------|-------|----------|--------------|------------|---------------|------------|-----------|------------------|----------|
| | mg/dL | % | mg/dL | % | | | | | | | |
| Beer 1 | 3347 | 4.2 | | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Beer 2 | 3395 | 4.3 | | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Beer 3 | 3504 | 4.4 | | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Beer 4 | 3551 | 4.5 | | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Beer 5 | 4047 | 5.1 | | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Beer 6 | 4047 | 5.1 | | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Beer 7 | 4054 | 5.1 | | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Beer 8 | 4090 | 5.2 | | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Wine sample | 8890 | 11.3 | | 18 0.023 | | ✓ | ✓ | ✓ | | ✓ | |

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Table S3: The results of 101 strong alcoholic beverages and 2 non-food-ethanol containing liquids used in the production of illegal drinks.

| No | EtOH | | MeOH | | tert-butanol (2-methyl-2- propanol) | n- propanol | isoamyl alcohol (3-methyl-1- butanol) | Isobutanol (2-methyl- 1- propanol) | n-butanol | Ethyl Acetate | Anethole |
|----|-------------------------|------|-------------------------|------------------------------|---|----------------|--|---|-----------|------------------|----------|
| | mg/dL (in sample) | % | mg/dL (in sample) | g/hL (in 100% Alcohol) | | | | | | | |
| 1 | 26757 | 33.9 | 18 | 53 | ✓ | | | | | | |
| 2 | 26577 | 33.7 | 19 | 56 | ✓ | | | | | | |
| 3 | 26845 | 34.0 | 19 | 56 | ✓ | | | | | | |
| 4 | 28606 | 36.3 | 19 | 52 | ✓ | | | | | | |
| 5 | 35513 | 45.0 | 28 | 62 | | ✓ | ✓ | ✓ | | | |
| 6 | 30585 | 38.8 | 54 | 139 | | ✓ | ✓ | ✓ | | | |
| 7 | 29846 | 37.8 | 59 | 156 | | ✓ | ✓ | ✓ | | ✓ | |
| 8 | 21141 | 26.8 | 2517 | 8398 | | | | | | | |
| 9 | 21737 | 27.6 | 2611 | 8464 | | | | | | | |

| No | EtOH | | MeOH | | tert-butanol (2-methyl-2- propanol) | n- propanol | isoamyl alcohol (3-methyl-1- butanol) | Isobutanol (2-methyl- 1- propanol) | n-butanol | Ethyl Acetate | Anethole |
|----|-------------------------|------|-------------------------|------------------------------|---|----------------|--|---|-----------|------------------|----------|
| | mg/dL (in sample) | % | mg/dL (in sample) | g/hL (in 100% Alcohol) | | | | | | | |
| 10 | 25376 | 32.2 | 4674 | 12279 | | | | | | | |
| 11 | 25670 | 32.5 | 4690 | 12196 | | | | | | | |
| 12 | 23117 | 29.3 | 6253 | 16812 | | | ✓ | | | | |
| 13 | 24030 | 30.5 | 6301 | 16404 | | | ✓ | ✓ | | | |
| 14 | 24906 | 31.6 | 6615 | 16571 | | | ✓ | ✓ | | | |
| 15 | 25587 | 32.4 | 6862 | 16698 | | | ✓ | | | | |
| 16 | 27385 | 34.7 | 7392 | 16784 | | | ✓ | | | | |
| 17 | 13756 | 17.4 | 15523 | 41915 | | | | | | | |
| 18 | 23521 | 29.8 | | | ✓ | | ✓ | | | | |
| 19 | 25461 | 32.3 | | | ✓ | ✓ | ✓ | ✓ | | | |
| 20 | 26033 | 33.0 | | | ✓ | | ✓ | ✓ | | | |
| 21 | 26808 | 34.0 | | | ✓ | ✓ | ✓ | ✓ | | | |
| 22 | 27082 | 34.3 | | | ✓ | ✓ | ✓ | ✓ | | | |
| 23 | 27733 | 35.1 | | | ✓ | ✓ | ✓ | ✓ | | | |
| 24 | 28156 | 35.7 | | | ✓ | ✓ | ✓ | ✓ | | | |
| 25 | 28232 | 35.8 | | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| 26 | 29204 | 37.0 | | | ✓ | ✓ | ✓ | ✓ | | | |
| 27 | 29509 | 37.4 | | | ✓ | ✓ | ✓ | | | | |
| 28 | 29966 | 38.0 | | | ✓ | ✓ | ✓ | ✓ | | | |
| 29 | 30505 | 38.7 | | | ✓ | ✓ | ✓ | ✓ | | | |
| 30 | 31264 | 39.6 | | | ✓ | ✓ | ✓ | ✓ | | | |
| 31 | 32049 | 40.6 | | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| 32 | 32434 | 41.1 | | | ✓ | | ✓ | | | | |
| 33 | 33018 | 41.8 | | | ✓ | | ✓ | | | | |
| 34 | 33133 | 42.0 | | | ✓ | | ✓ | | | | |
| 35 | 33606 | 42.6 | | | ✓ | ✓ | ✓ | | | | |
| 36 | 34637 | 43.9 | | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| 37 | 35234 | 44.7 | | | ✓ | | ✓ | | | | |
| 38 | 35439 | 44.9 | | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| 39 | 37294 | 47.3 | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 40 | 37468 | 47.5 | | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| 41 | 37880 | 48.0 | | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| 42 | 39456 | 50.0 | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |

| No | EtOH | | MeOH | | | | | | | | |
|----|-------------------------|------|-------------------------|------------------------------|---|----------------|--|---|-----------|------------------|----------|
| | mg/dL (in sample) | % | mg/dL (in sample) | g/hL (in 100% Alcohol) | tert-butanol (2-methyl-2- propanol) | n- propanol | isoamyl alcohol (3-methyl-1- butanol) | Isobutanol (2-methyl- 1- propanol) | n-butanol | Ethyl Acetate | Anethole |
| 43 | 30664 | 38.9 | | | ✓ | | | ✓ | | | |
| 44 | 31463 | 39.9 | | | ✓ | | | ✓ | | | |
| 45 | 31561 | 40.0 | | | ✓ | ✓ | | ✓ | | | |
| 46 | 31934 | 40.5 | | | ✓ | | | ✓ | | | |
| 47 | 32862 | 41.7 | | | ✓ | | | ✓ | | | |
| 48 | 33115 | 42.0 | | | ✓ | ✓ | | ✓ | | | |
| 49 | 34412 | 43.6 | | | ✓ | ✓ | | ✓ | | | |
| 50 | 34981 | 44.3 | | | ✓ | ✓ | | ✓ | | | |
| 51 | 29015 | 36.8 | | | ✓ | | | | ✓ | | |
| 52 | 34690 | 44.0 | | | ✓ | | | | ✓ | | |
| 53 | 38332 | 48.6 | | | ✓ | | | | ✓ | | |
| 54 | 32711 | 41.5 | | | ✓ | | | | | ✓ | |
| 55 | 24244 | 30.7 | | | ✓ | | | | | | |
| 56 | 24268 | 30.8 | | | ✓ | | | | | | |
| 57 | 25561 | 32.4 | | | ✓ | | | | | | |
| 58 | 25720 | 32.6 | | | ✓ | | | | | | |
| 59 | 25785 | 32.7 | | | ✓ | | | | | | |
| 60 | 25861 | 32.8 | | | ✓ | | | | | | |
| 61 | 25913 | 32.8 | | | ✓ | | | | | | |
| 62 | 25918 | 32.8 | | | ✓ | | | | | | |
| 63 | 27985 | 35.5 | | | ✓ | | | | | | |
| 64 | 28710 | 36.4 | | | ✓ | | | | | | |
| 65 | 28715 | 36.4 | | | ✓ | | | | | | |
| 66 | 28944 | 36.7 | | | ✓ | | | | | | |
| 67 | 29150 | 36.9 | | | ✓ | | | | | | |
| 68 | 29383 | 37.2 | | | ✓ | | | | | | |
| 69 | 29911 | 37.9 | | | ✓ | | | | | | |
| 70 | 29931 | 37.9 | | | ✓ | | | | | | |
| 71 | 30345 | 38.5 | | | ✓ | | | | | | |
| 72 | 30518 | 38.7 | | | ✓ | | | | | | |
| 73 | 30977 | 39.3 | | | ✓ | | | | | | |
| 74 | 31150 | 39.5 | | | ✓ | | | | | | |
| 75 | 31517 | 39.9 | | | ✓ | | | | | | |

| No | EtOH | | MeOH | | | | | | | | |
|-----|-------------------------|------|-------------------------|------------------------------|---|----------------|--|---|-----------|------------------|----------|
| | mg/dL (in sample) | % | mg/dL (in sample) | g/hL (in 100% Alcohol) | tert-butanol (2-methyl-2- propanol) | n- propanol | isoamyl alcohol (3-methyl-1- butanol) | Isobutanol (2-methyl- 1- propanol) | n-butanol | Ethyl Acetate | Anethole |
| 76 | 31661 | 40.1 | | | ✓ | | | | | | |
| 77 | 31843 | 40.4 | | | ✓ | | | | | | |
| 78 | 32064 | 40.6 | | | ✓ | | | | | | |
| 79 | 32154 | 40.8 | | | ✓ | | | | | | |
| 80 | 32502 | 41.2 | | | ✓ | | | | | | |
| 81 | 32697 | 41.4 | | | ✓ | | | | | | |
| 82 | 32868 | 41.7 | | | ✓ | | | | | | |
| 83 | 32991 | 41.8 | | | ✓ | | | | | | |
| 84 | 33115 | 42.0 | | | ✓ | | | | | | |
| 85 | 33258 | 42.2 | | | ✓ | | | | | | |
| 86 | 33571 | 42.5 | | | ✓ | | | | | | |
| 87 | 33772 | 42.8 | | | ✓ | | | | | | |
| 88 | 33913 | 43.0 | | | ✓ | | | | | | |
| 89 | 35794 | 45.4 | | | ✓ | | | | | | |
| 90 | 36979 | 46.9 | | | ✓ | | | | | | |
| 91 | 37882 | 48.0 | | | ✓ | | | | | | |
| 92 | 38080 | 48.3 | | | ✓ | | | | | | |
| 93 | 38785 | 49.2 | | | ✓ | | | | | | |
| 94 | 30319 | 38.4 | | | | ✓ | ✓ | ✓ | | | ✓ |
| 95 | 30983 | 39.3 | | | | ✓ | ✓ | ✓ | | | ✓ |
| 96 | 31220 | 39.6 | | | | ✓ | ✓ | ✓ | | | ✓ |
| 97 | 31513 | 39.9 | | | | ✓ | ✓ | ✓ | | | ✓ |
| 98 | 31588 | 40.0 | | | | ✓ | ✓ | ✓ | | | ✓ |
| 99 | 31906 | 40.4 | | | | ✓ | ✓ | ✓ | | | ✓ |
| 100 | 30812 | 39.1 | | | | | | ✓ | | | |
| 101 | 34821 | 44.1 | | | | ✓ | | ✓ | | | |
| 102 | 63319 | 80.3 | | | ✓ | | | | | | |
| 103 | 78354 | 99.3 | | | ✓ | | | | | | |

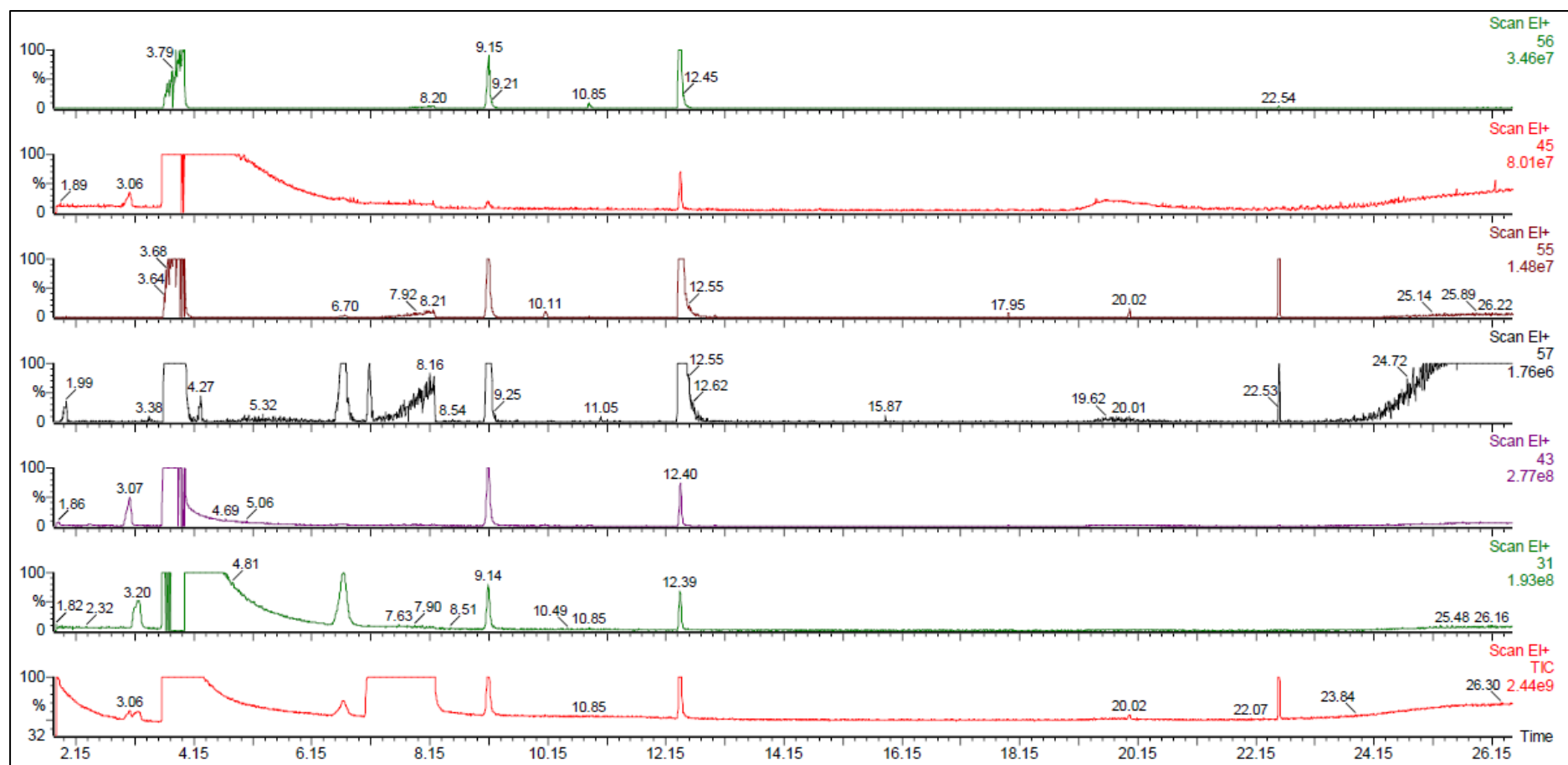


Figure S1. Overlaid TIC and mass chromatograms of the raki sample which is suitable to the Codex (Table S1,#2).

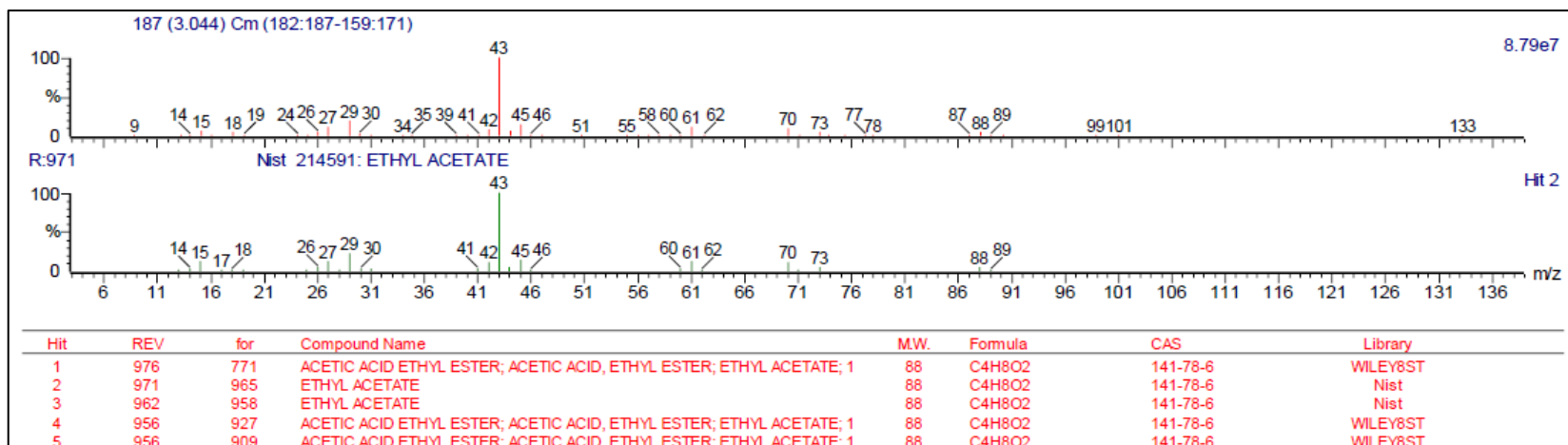


Figure S2: Mass spectrum and library search result for ethyl acetate obtained from the chromatogram shown in Figure S1.

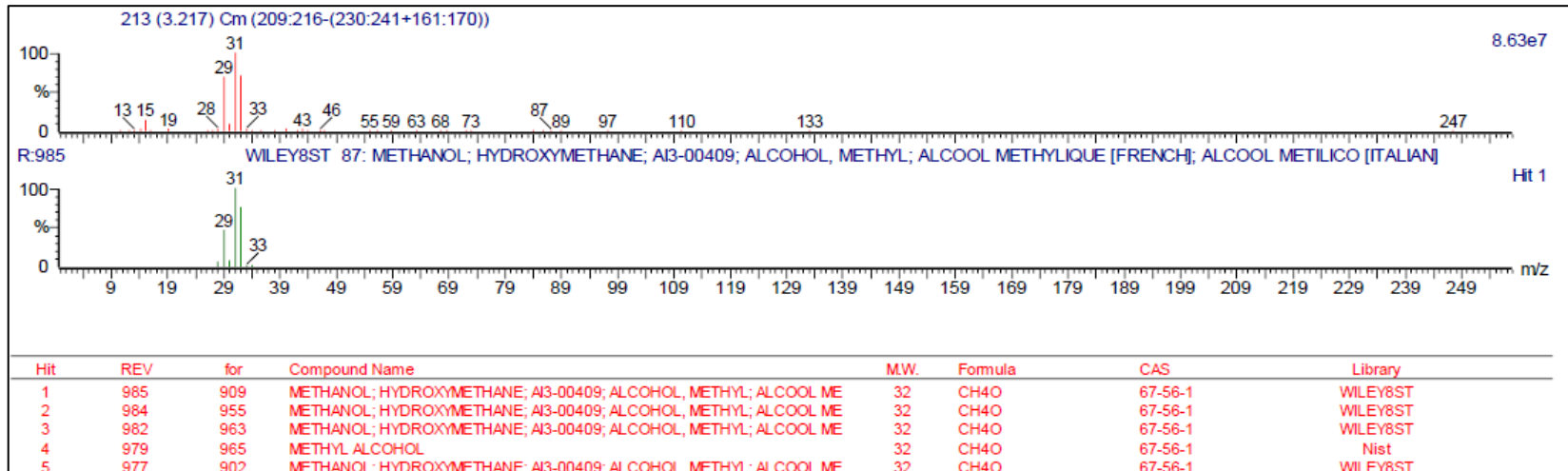


Figure S3: Mass spectrum and library search result for methanol obtained from the chromatogram shown in Figure S1.

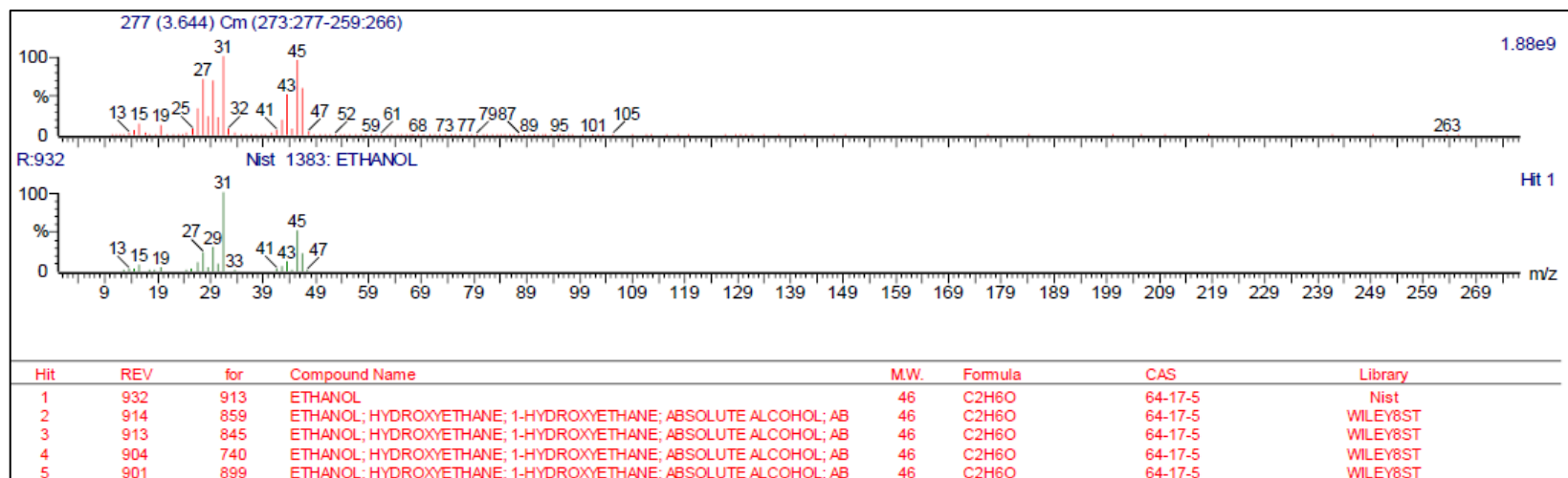


Figure S4: Mass spectrum and library search result for ethanol obtained from the chromatogram shown in Figure S1.

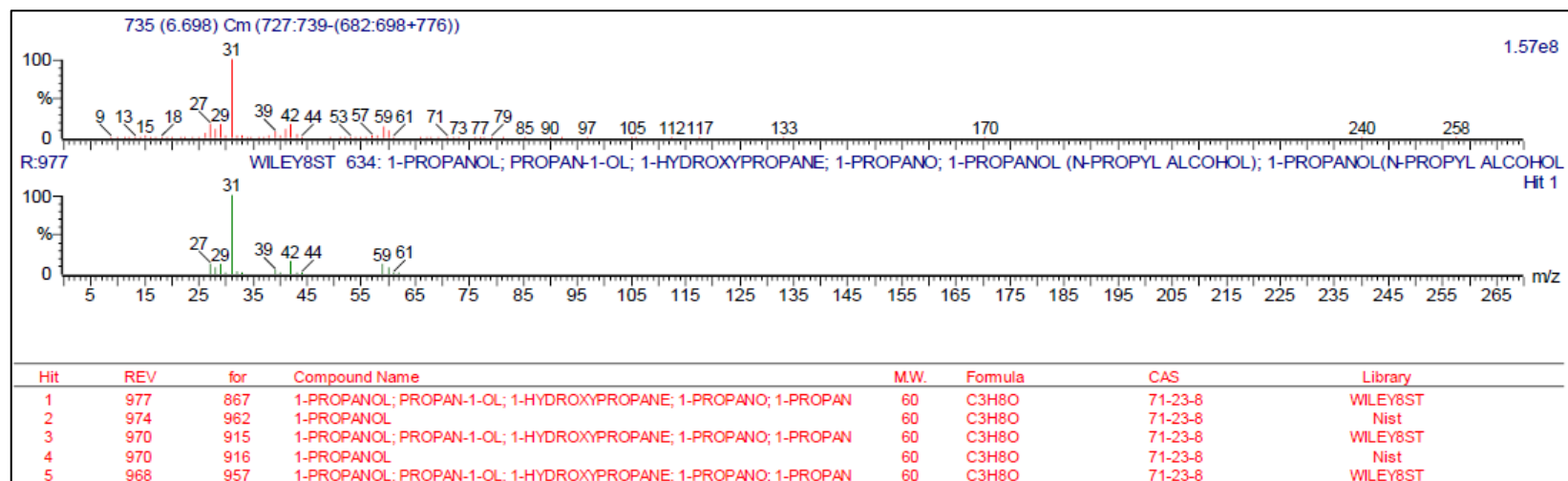


Figure S5: Mass spectrum and library search result for 1-propanol obtained from the chromatogram shown in Figure S1.

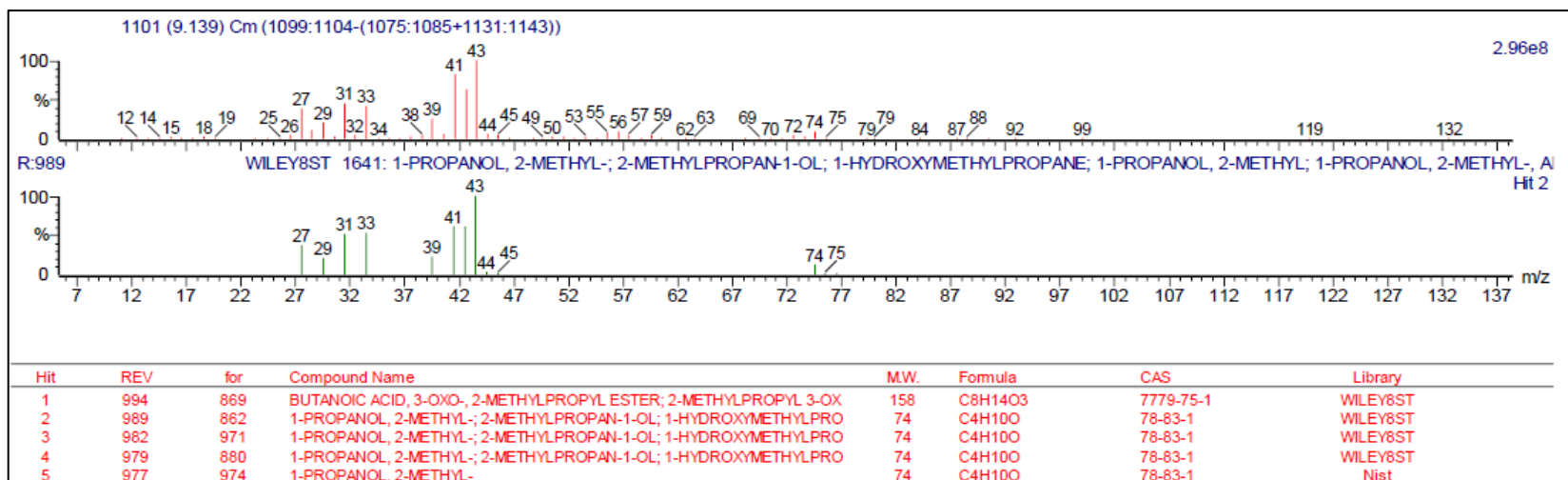


Figure S6: Mass spectrum and library search result for 2-methyl-1-propanol obtained from the chromatogram shown in Figure S1.

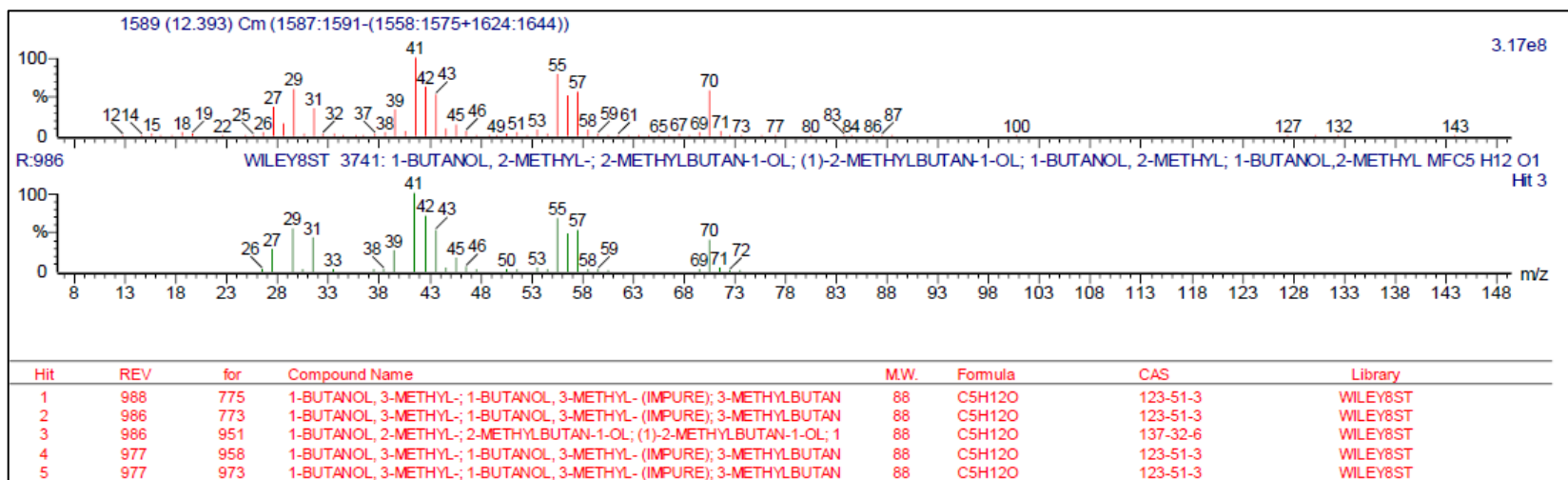


Figure S7: Mass spectrum and library search result for 3-methyl-1-butanol obtained from the chromatogram shown in Figure S1.

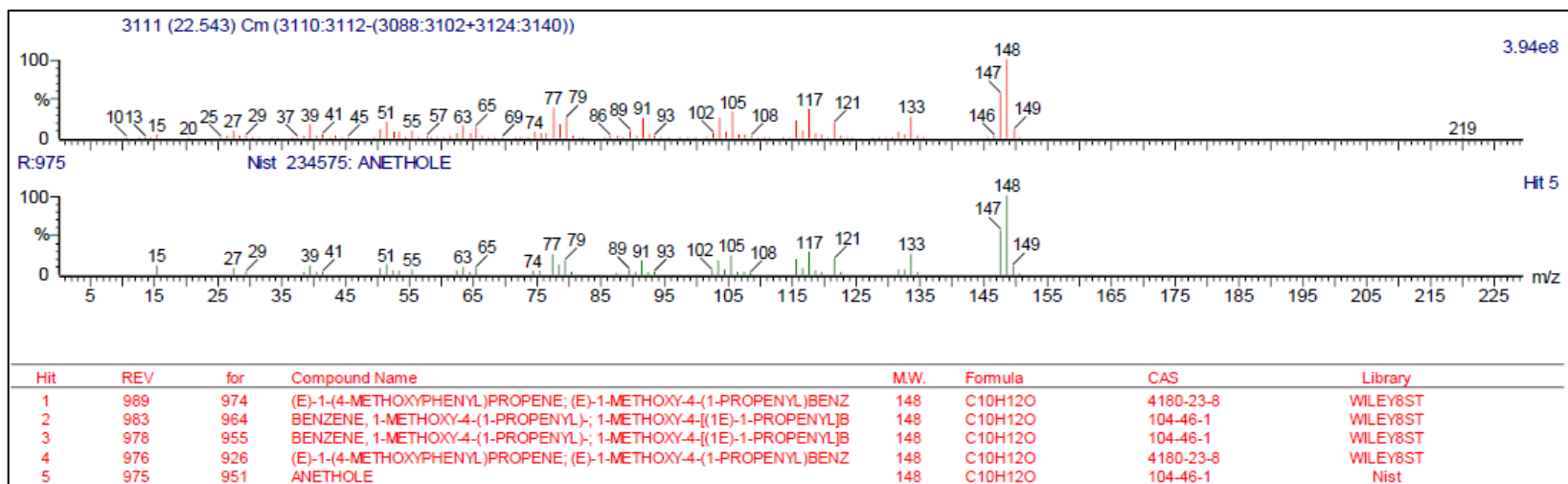


Figure S8: Mass spectrum and library search result for anethole obtained from the chromatogram shown in Figure S1.

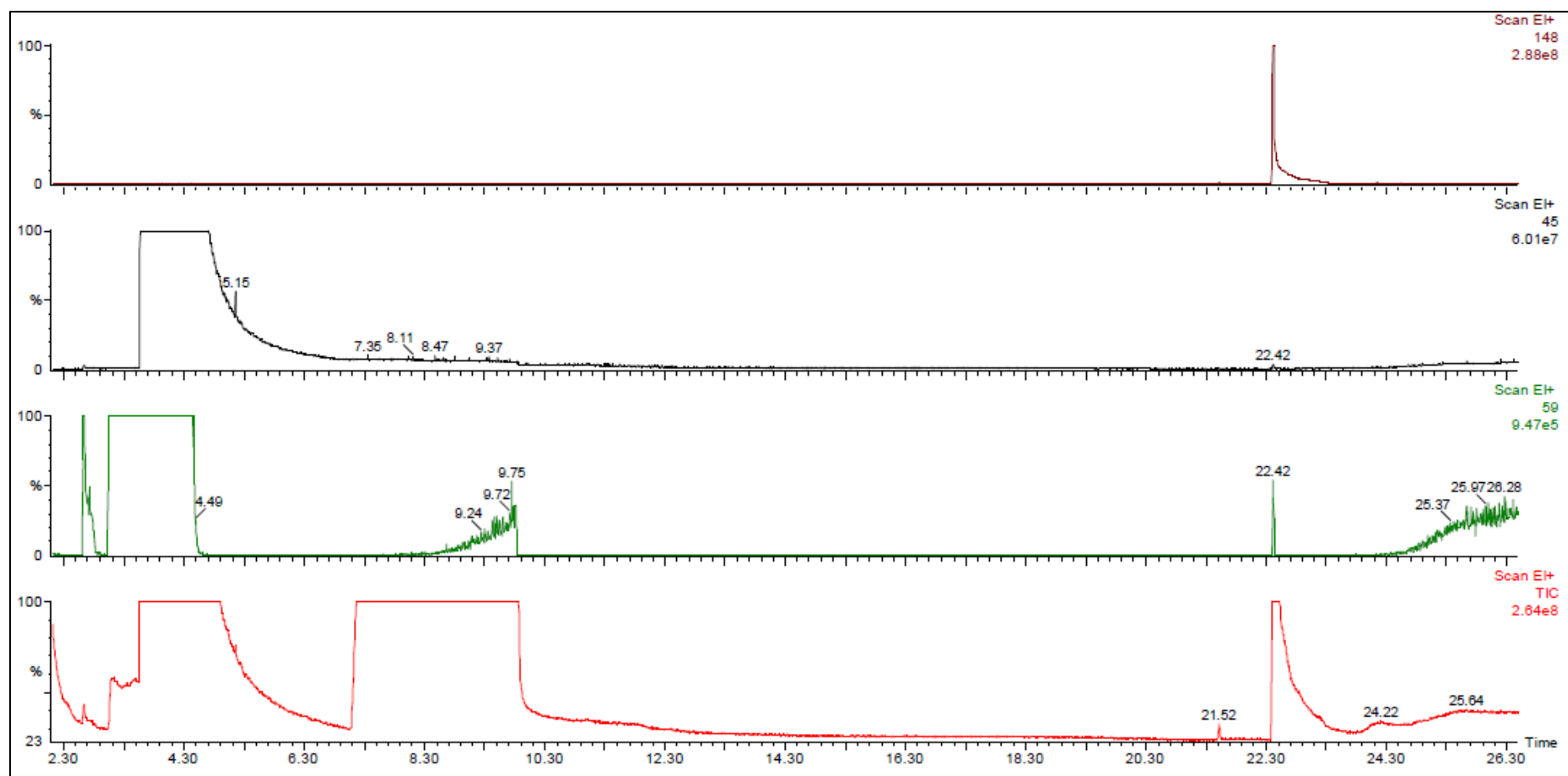


Figure S9: Overlaid TIC and mass chromatograms of the rakı sample (Table S1,#68) containing denaturant.

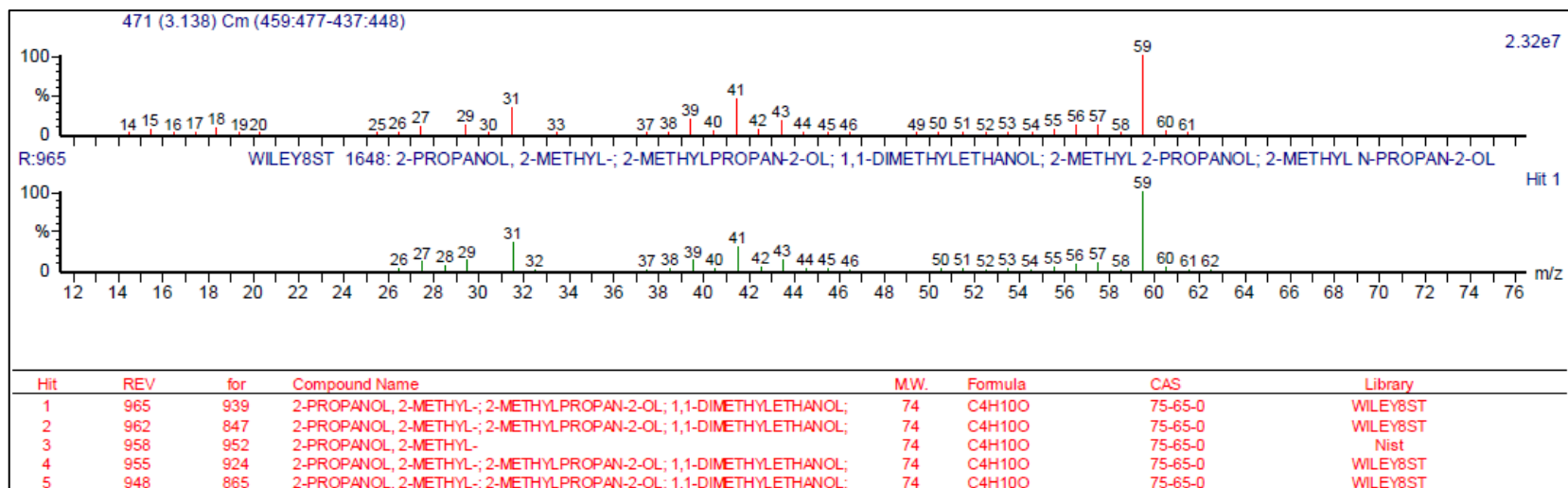


Figure S10: Mass spectrum and library search result for 2-methyl-2-propanol (tert-butanol) obtained from the chromatogram shown in Figure S9.

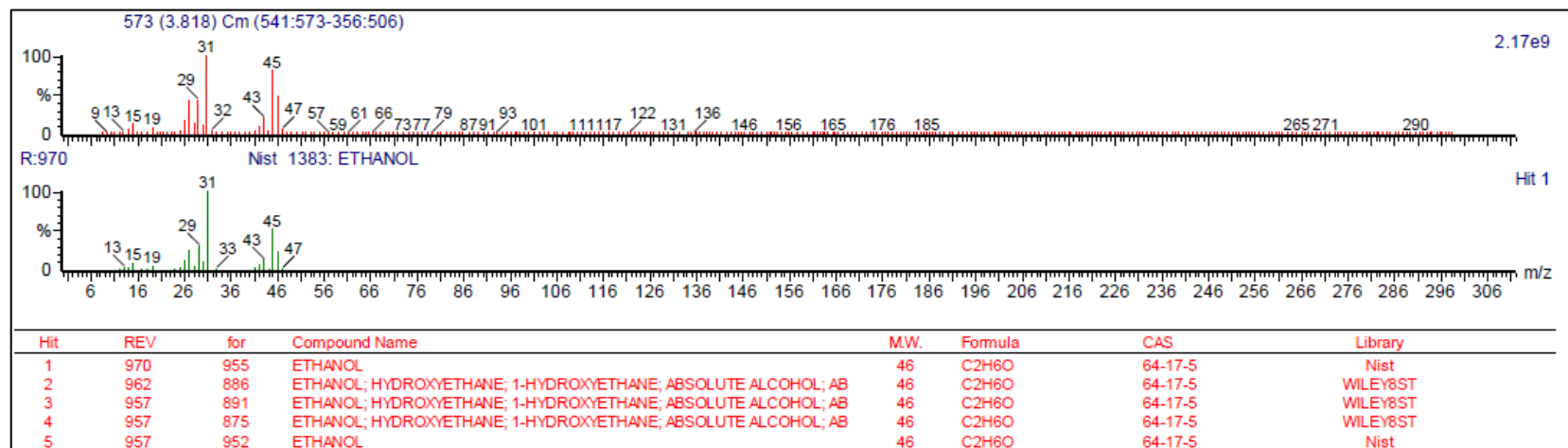


Figure S11: Mass spectrum and library search result for ethanol obtained from the chromatogram shown in Figure S9.

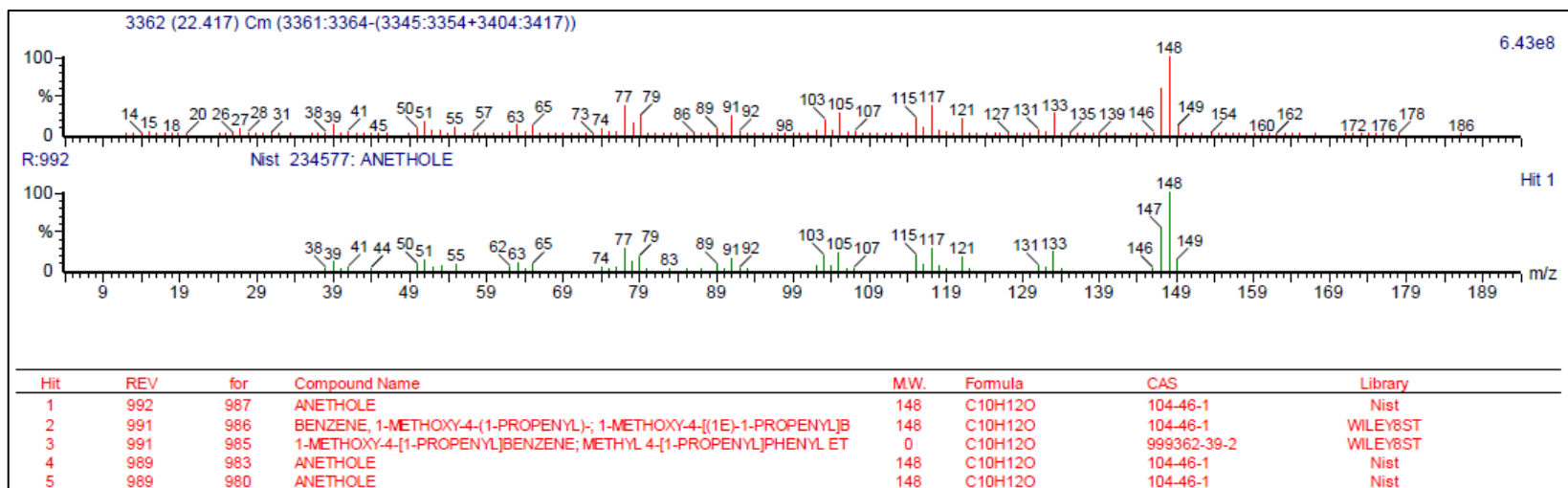


Figure S12: Mass spectrum and library search result for anethole obtained from the chromatogram shown in Figure S9.