

## Примеры хроматограмм ZB-5ms

### Окружающая среда

#### Polynuclear Aromatic Hydrocarbons: EPA Method 8100

**Column:** Zebron ZB-5ms

**Dimensions:** 10 meter x 0.10 mm x 0.10  $\mu$ m

**Part No.:** 7CB-G010-02

**Injection:** Split 20:1 @ 320 °C, 1  $\mu$ L

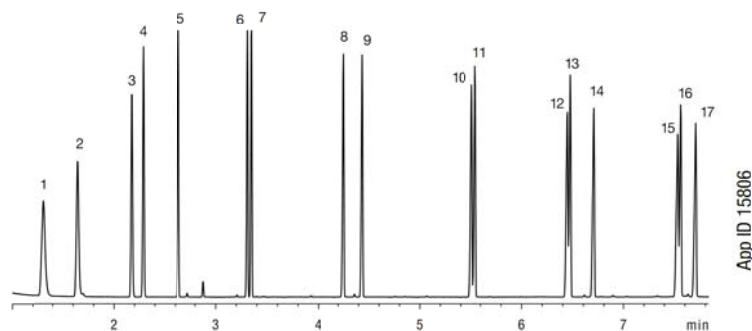
**Carrier Gas:** Helium @ 0.6 mL/min (constant flow)

**Oven Program:** 100 °C to 200 °C @ 33 °C/min to 320 °C @ 25 °C/min

**Detector:** FID @ 330 °C

**Sample:**

|                        |                            |
|------------------------|----------------------------|
| 1. Naphthalene         | 10. Benz[a]anthracene      |
| 2. 2-Methylnaphthalene | 11. Chrysene               |
| 3. Acenaphthalene      | 12. Benzo[b]fluoranthene   |
| 4. Acenaphthene        | 13. Benzo[k]fluoranthene   |
| 5. Fluorene            | 14. Benzo[a]pyrene         |
| 6. Phenanthrene        | 15. Indeno[1,2,3-cd]pyrene |
| 7. Anthracene          | 16. Dibenzo[a,h]anthracene |
| 8. Fluoranthene        | 17. Benzo[g,h,i]perylene   |
| 9. Pyrene              |                            |



#### Nitrogen and Phosphorous Pesticides: EPA Method 507

**Column:** Zebron ZB-5ms

**Dimensions:** 30 meter x 0.25 mm x 0.25  $\mu$ m

**Part No.:** 7HG-G010-11

**Injection:** Split 20:1 @ 250 °C, 1  $\mu$ L

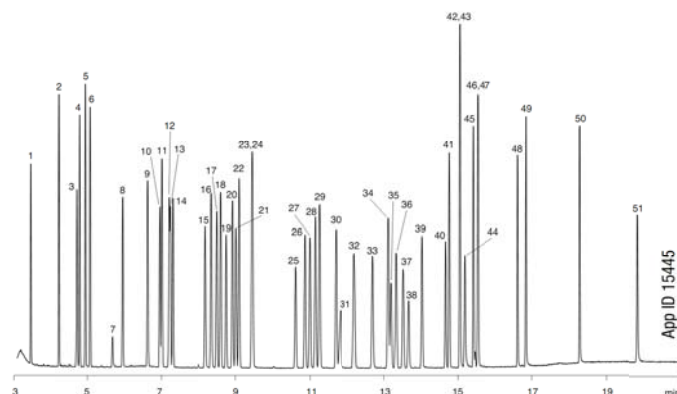
**Carrier Gas:** Helium @ 1.0 mL/min (constant flow)

**Oven Program:** 100 °C to 170 °C @ 20 °C/min to 210 °C @ 4 °C/min to 300 °C @ 20 °C/min for 4 min

**Detector:** MSD @ 240 °C

**Sample:**

|                           |                            |                      |
|---------------------------|----------------------------|----------------------|
| 1. Dichlorvos             | 19. Profluralin            | 37. Pendimethalin    |
| 2. EPTC                   | 20. Terbufos               | 38. MGK-264 (Isomer) |
| 3. Mevinphos              | 21. Pronamid (Propyzamide) | 39. Merphos          |
| 4. Butylate               | 22. Diazinon (Dimpylate)   | 40. Stirofos         |
| 5. Vernolate              | 23. Disulfoton             | (Tetrachlorovinphos) |
| 6. Pebulate (Tillam)      | 24. Terbacil               | 41. Butachlor        |
| 7. Tebuthiuron            | 25. Metribuzin             | 42. Napropamide      |
| 8. Molinate               | 26. Alachlor               | 43. Fenamiphos       |
| 9. Propachlor             | 27. Simetryn               | 44. Tricyclazole     |
| 10. Ethoprop              | 28. Ametryn                | 45. Oxadiazon        |
| 11. Cycloate              | 29. Prometryn              | 46. Oxyfluorfen      |
| 12. Chlorpropham          | 30. Terbutryn              | 47. Carboxin         |
| 13. Trifluralin           | 31. Bromacil               | 48. Norflurazon      |
| 14. Benefin (Benfluralin) | 32. Metolachlor            | 49. Hexazinone       |
| 15. Atraton               | 33. Triadimefon            | 50. Fenarimol        |
| 16. Prometon              | 34. Diphenamide            | 51. Fluridone        |
| 17. Atrazine              | 35. MGK-264                |                      |
| 18. Propazine             | 36. Isopropalin            |                      |



## Продукты питания

### Phthalate Esters: EPA Method 606

**Column:** Zebron ZB-5ms

**Dimensions:** 30 meter x 0.32 mm x 0.25  $\mu$ m

**Part No.:** 7HM-G010-11

**Injection:** Split 20:1 @ 300 °C, 1  $\mu$ L

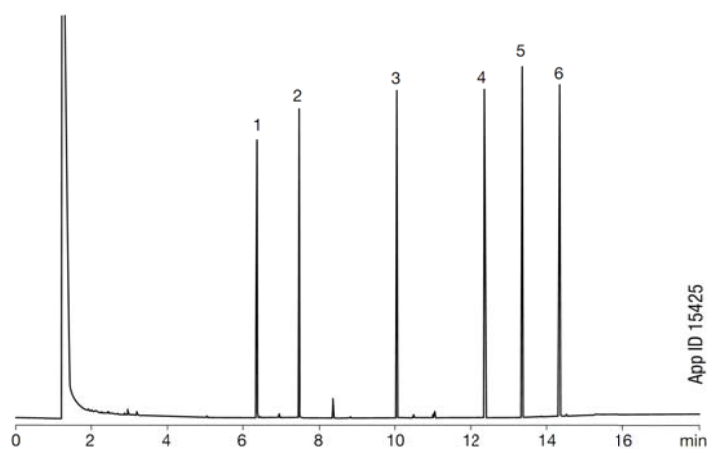
**Carrier Gas:** Helium @ 2.6 mL/min (constant flow)

**Oven Program:** 75 °C to 300 °C @ 15 °C/min for 5 min

**Detector:** FID @ 300 °C

**Sample:**

1. Dimethyl Phthalate
2. Diethyl Phthalate
3. Di-n-butyl Phthalate
4. Butyl Benzyl Phthalate
5. Bis(2-ethylhexyl) Phthalate
6. Di-n-octyl Phthalate



### Melamine in Baby Formula

**Column:** Zebron ZB-5ms

**Dimensions:** 30 meter x 0.25 mm x 0.25  $\mu$ m

**Part No.:** 7HG-G010-11

**Injection:** Splitless @ 280 °C, 1  $\mu$ L

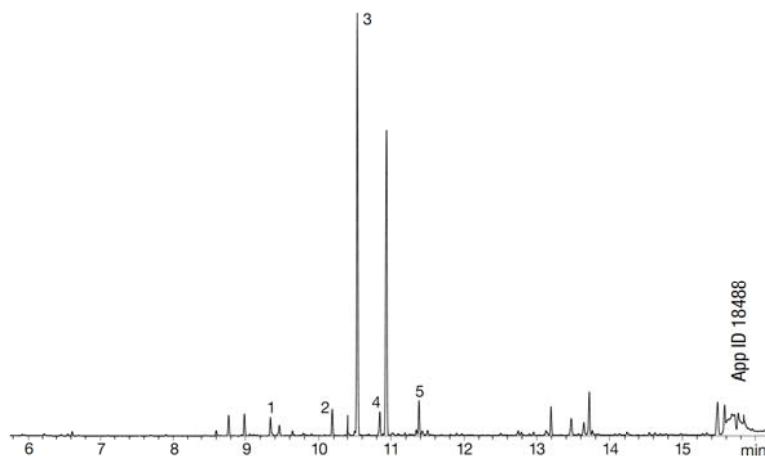
**Carrier Gas:** Helium @ 0.9 mL/min (constant flow)

**Oven Program:** 75 °C for 1 min to 320 °C @ 15 °C/min for 2.67 min

**Detector:** MSD @ 320 °C

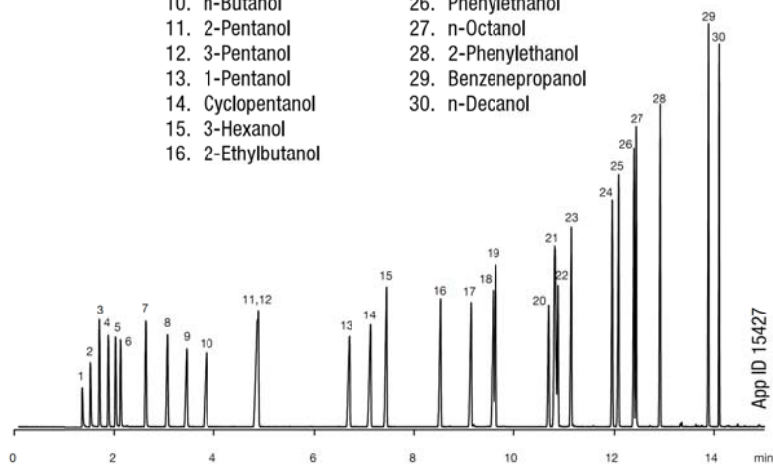
**Sample:** Analytes were derivatized with BSTFA in pyridine as per FDA Screening Method

1. Cyanuric Acid
2. Ammelide
3. DACP (IS)
4. Ammeline
5. Melamine



**Химическая промышленность****Alcohols****Column:** Zebron ZB-5ms**Dimensions:** 30 meter x 0.25 mm x 0.50  $\mu$ m**Part No.:** 7HG-G010-17**Injection:** Split 150:1 @ 200 °C, 0.2  $\mu$ L**Carrier Gas:** Helium @ 1.4 mL/min (constant flow)**Oven Program:** 35 °C for 4 min to 100 °C @ 10 °C/min to 250 °C @ 25 °C/min**Detector:** MSD; 20-300 amu**Sample:** Equal mixture of pure alcohols

- |                        |                          |
|------------------------|--------------------------|
| 1. Methanol            | 17. n-Hexanol            |
| 2. Ethanol             | 18. Cyclohexanol         |
| 3. Isopropanol         | 19. 4-Heptanol           |
| 4. tert-Butanol        | 20. 2-Methylcyclohexanol |
| 5. Allyl alcohol       | 21. 3-Methylcyclohexanol |
| 6. n-Propanol          | 22. 4-Methylcyclohexanol |
| 7. 2-Butanol           | 23. n-Heptanol           |
| 8. 2-Methyl-1-propanol | 24. 2-Ethylhexanol       |
| 9. Methallyl alcohol   | 25. Benzyl alcohol       |
| 10. n-Butanol          | 26. Phenylethanol        |
| 11. 2-Pentanol         | 27. n-Octanol            |
| 12. 3-Pentanol         | 28. 2-Phenylethanol      |
| 13. 1-Pentanol         | 29. Benzenepropanol      |
| 14. Cyclopentanol      | 30. n-Decanol            |
| 15. 3-Hexanol          |                          |
| 16. 2-Ethylbutanol     |                          |

**Phenols****Column:** Zebron ZB-5ms**Dimensions:** 30 meter x 0.25 mm x 0.25  $\mu$ m**Part No.:** 7HG-G010-11**Injection:** Split 10:1 @ 250 °C, 1  $\mu$ L**Carrier Gas:** Helium @ 1.4 mL/min (constant flow)**Oven Program:** 40 °C for 0.5 min to 220 °C @ 22 °C/min to 325 °C @ 35 °C/min for 3 min**Detector:** MSD @ 240 °C**Sample:** Analytes are 20 ppm

- |                       |                                |
|-----------------------|--------------------------------|
| 1. Phenol             | 10. 2,6-Dichlorophenol         |
| 2. 2-Chlorophenol     | 11. 4-Chloro-3-methylphenol    |
| 3. 2-Methylphenol     | 12. 2,4,6-Trichlorophenol      |
| 4. 3-Methylphenol     | 13. 2,4,5-Trichlorophenol      |
| 5. 4-Methylphenol     | 14. 2,4-Dinitrophenol          |
| 6. 2-Nitrophenol      | 15. 4-Nitrophenol              |
| 7. 2,4-Dimethylphenol | 16. 2,3,4,6-Tetrachlorophenol  |
| 8. Benzoic Acid       | 17. 4,6-Dinitro-2-methylphenol |
| 9. 2,4-Dichlorophenol | 18. Pentachlorophenol          |
|                       | 19. Dinoseb                    |

