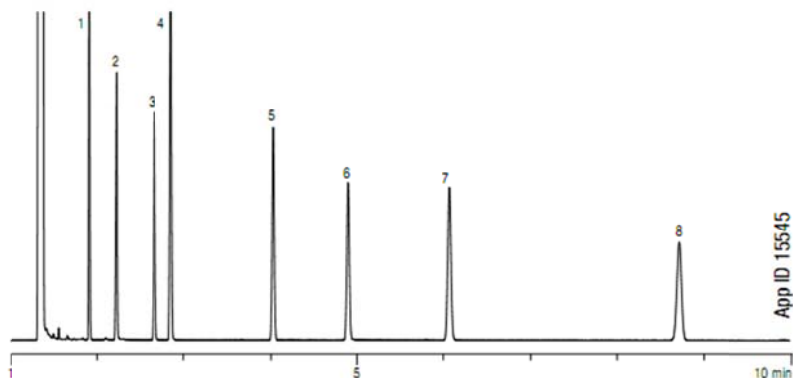


## Примеры хроматограмм ZB-1ms

### Test Conditions for Zebron ZB-1ms



**Column:** Zebron ZB-1ms  
**Dimensions:** 30 meter x 0.25 mm x 0.25  $\mu$ m  
**Part No.:** 7HG-G011-11  
**Injection:** Split Flow 100 mL/min @ 250 °C, 1.0  $\mu$ L  
**Carrier Gas:** Hydrogen @ 1.18 mL/min (constant flow)  
**Oven Program:** 140 °C (Isothermal)  
**Detector:** FID @ 325 °C  
**Sample:**

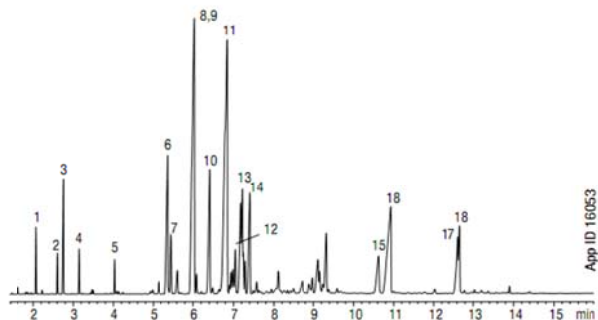
1. Decane
2. 2-Ethylhexanoic Acid
3. 4-Chlorophenol
4. Naphthalene
5. Tridecane
6. 1-Undecanol
7. Dicyclohexylamine
8. Pentadecane

## Продукты питания, душистые и ароматические вещества

### Ylang Ylang Oil

**Column:** Zebron ZB-1ms  
**Dimensions:** 10 meter x 0.10 mm x 0.10  $\mu$ m  
**Part No.:** 7CB-G011-02  
**Injection:** Split 120:1 @ 160 °C, 0.2  $\mu$ L  
**Carrier Gas:** Helium @ 0.5 mL/min (constant flow)  
**Oven Program:** 60 °C to 120 °C @ 15 °C/min to 160 °C @ 5 °C/min to 220 °C @ 20 °C/min  
**Detector:** MSD; 18-400 amu  
**Sample:** Oil was 10 % in dichloromethane

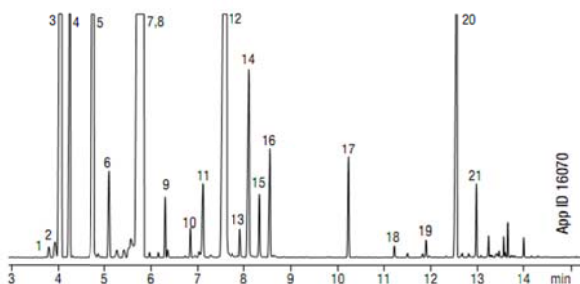
- |                     |                           |                        |
|---------------------|---------------------------|------------------------|
| 1. p-Methyl anisole | 7. Copaene                | 13. Farnasene          |
| 2. Methyl benzoate  | 8. $\beta$ -Caryophyllene | 14. $\delta$ -Cadinene |
| 3. Linalool         | 9. Cinnamyl acetate       | 15. Farnesol           |
| 4. Benzyl acetate   | 10. Humulene              | 16. Benzyl benzoate    |
| 5. Geraniol         | 11. Germacrene            | 17. Benzyl salicylate  |
| 6. Geranyl acetate  | 12. $\alpha$ -Amorphene   | 18. Farnesyl acetate   |



### Rosemary Oil

**Column:** Zebron ZB-1ms  
**Dimensions:** 10 meter x 0.10 mm x 0.10  $\mu$ m  
**Part No.:** 7CB-G011-02  
**Injection:** Split 120:1 @ 160 °C, 0.2  $\mu$ L  
**Carrier Gas:** Helium @ 0.4 mL/min (constant flow)  
**Oven Program:** 45 °C for 2 min to 130 °C @ 8 °C/min to 200 °C @ 30 °C/min for 2 min  
**Detector:** MSD; 18-400 amu  
**Sample:** Sample was 10 % in dichloromethane

- |                      |                        |                             |
|----------------------|------------------------|-----------------------------|
| 1. Tricyclene        | 8. Limonene            | 15. 4-Terpineol             |
| 2. $\alpha$ -Thujene | 9. $\gamma$ -Terpinene | 16. Terpineol               |
| 3. $\alpha$ -Pinene  | 10. Terpinolene        | 17. Bornyl Acetate          |
| 4. Camphene          | 11. Linalool           | 18. Eugenol                 |
| 5. $\beta$ -Pinene   | 12. Camphor            | 19. Copaene                 |
| 6. $\beta$ -Myrcene  | 13. Isoborneol         | 20. Caryophyllene           |
| 7. Eucalyptol        | 14. Borneol            | 21. $\alpha$ -Caryophyllene |

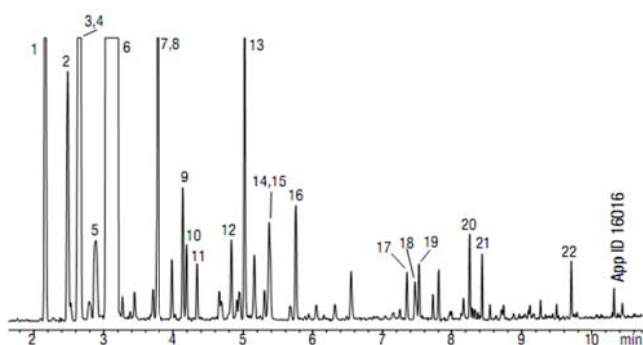


**Cold-Pressed Orange Oil**

**Column:** Zebron ZB-1ms  
**Dimensions:** 10 meter x 0.10 mm x 0.10  $\mu$ m  
**Part No.:** 7CB-G011-02  
**Injection:** Split 120:1 @ 160 °C, 0.2  $\mu$ L  
**Carrier Gas:** Helium @ 0.3 mL/min (constant flow)  
**Oven Program:** 60 °C to 130 °C @ 10 °C/min to 280 °C @ 30 °C/min for 3 min  
**Detector:** MSD

**Sample:** Sample was 10 % in dichloromethane

- |                          |                          |
|--------------------------|--------------------------|
| 1. $\alpha$ -Pinene      | 10. trans-Limonene oxide |
| 2. $\beta$ -Phellandrine | 11. Citronellal          |
| 3. $\beta$ -Myrcene      | 12. $\alpha$ -Terpineol  |
| 4. Octanal               | 13. Decanal              |
| 5. 3-Carene              | 14. Carvone              |
| 6. Limonene              | 15. Neral                |
| 7. Nonanal               | 16. Geranial             |
| 8. Linalool              | 17. $\alpha$ -Cubebene   |
| 9. cis-Limonene oxide    | 18. $\beta$ -Cubebene    |
|                          | 19. Dodecanal            |
|                          | 20. Valencene            |
|                          | 21. Cadinene             |
|                          | 22. Nootkatone           |

**ГСМ и топлива****Sulfur Components in Fuel**

**Column:** Zebron ZB-1MS  
**Dimensions:** 30 meter x 0.32 mm x 1.00  $\mu$ m  
**Part No.:** 7HM-G011-22  
**Injection:** Split 10:1 @ 270 °C, 1  $\mu$ L  
**Carrier Gas:** Helium @ 2 mL/min (constant flow)  
**Oven Program:** 40 °C for 1 min to 300 °C @ 10 °C/min for 3 min  
**Detector:** SCD @ 320 °C

**Sample:** California Phase II Reference Fuel - 30 mg/kg total sulfur

1. Thiophene
2. Dimethyldisulfide
3. 2-Me-thiophene
4. 3-Me-thiophene
5. C2-Thiophenes
6. Diethylsulfide
7. Dibutylsulfide
8. Benzothiophene
9. C1-Benzothiophenes

