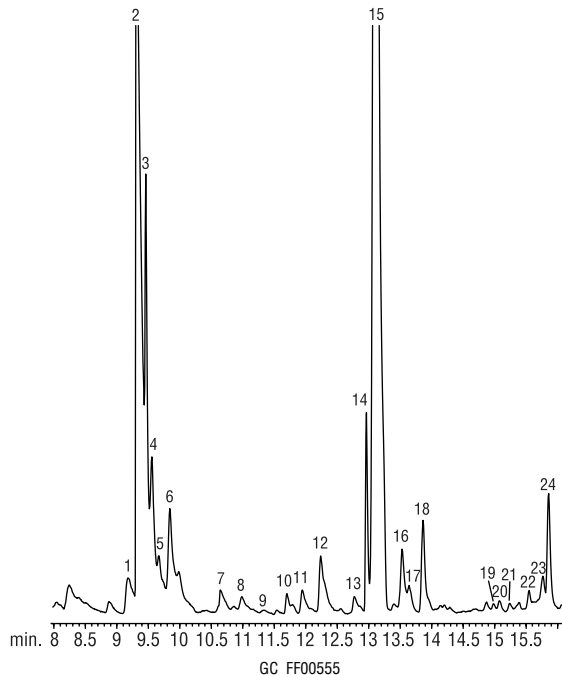


Flavor Compounds in Malt Whiskey

Stabilwax®-DA



- | | |
|----------------------------------|--|
| 1. ethyl octanoate | 15. ethyl decanoate |
| 2. acetic acid | 16. furfuryl alcohol + isoamyl octanoate |
| 3. siloxane | 17. isovaleric acid + 2-methylbutyric acid |
| 4. 1-hydroxy-2,3-butadione | 18. diethyl succinate |
| 5. 1-hydroxy-2-propanone acetate | 19. 3-methyl-2(5H)-furanone (possible) |
| 6. furfural | 20. valeric acid |
| 7. formic acid | 21. ethyl undecanoate |
| 8. propionic acid | 22. isobutyl decanoate |
| 9. isobutyric acid | 23. 2(5H)-furanone |
| 10. dimethyl sulfoxide | 24. unknown |
| 11. 5-methyl furfural | 25. diethyl pentanedioate |
| 12. methyl decanoate + unknown | |
| 13. butyric acid | |
| 14. siloxane | |

Stabilwax®-DA 30m, 0.18mm ID, 0.18µm (cat.# 550752)

Inj.: 10µL large volume injection (splitless), at 10µL/min.

Std. conc.: neat

Gerstel CIS Injector: 35°C (hold 2 min.), to 300°C @ 10°C/sec. (hold 5 min.)

Helium vent flow: 600mL/min with 1.8 min. vent end time

Carrier gas: helium

Linear velocity: 45cm/sec.

Oven temp.: 60°C (hold 2 min.) to 100°C @ 20°C/min., to 240°C @ 5°C/min. (hold 10 min.)

Det.: MSD

Transfer line temp.: 240°C

Quadrupole temp.: 150°C

MS source temp.: 230°C

Scan range: 30–400amu

Ionization: 70eV

Mode: EI

*Chromatogram courtesy of Kevin MacNamara, Ph.D.,
Irish Distilleries, Ltd.*