



## Amino Acids and Biogenic Amines in Wine and Beer

### Conditions

Sample Preparation: Derivatisation with diethyl ethoxymethylmalonate

Column: ACE 5 C18-HL, 250 x 4.6mm  
Part Number: ACE-321-2546

Mobile Phase: A. 25mM acetate buffer (pH 5.8)  
B: 80:20 MeCN/MeOH

Flow Rate: 0.8ml/min

Gradient:	T(mins)	%A	%B
	0	55	45
	20	40	60
	30.5	83	17
	33.5	83	17
	65	60	40
	73	28	72
	78	18	82
	82	0	100
	85	0	100

Temperature: 16°C  
Detection: DAD, 280, 269 and 300nm  
Injection Volume: 20µl

### Compounds

- |   |                      |
|---|----------------------|
| 1. Aspartic acid                                  | 18. Agmatine         |
| 2. Glutamic acid I. S.<br>( L-2-Aminoadipic acid) | 19. Valine           |
| 3. Asparagine                                     | 20. Methionine       |
| 4. Serine   | 21. Cysteine         |
| 5. Hydroxyproline                                 | 22. Isoleucine       |
| 6. Glutamine                                      | 23. Tryptophan       |
| 7. Histidine                                      | 24. Leucine          |
| 8. Glycine  | 25. Phenylalanine    |
| 9. Threonine                                      | 26. Ornithine        |
| 10. beta-Alanine                                  | 27. Lysine           |
| 11. Arginine                                      | 28. Spermidine       |
| 12. alpha-Alanine                                 | 29. Tyramine         |
| 13. GABA  | 30. Putrescine       |
| 14. Proline                                       | 31. Tryptamine       |
| 15. Histamine                                     | 32. Cadaverine       |
| 16. Tyrosine                                      | 33. Phenylethylamine |
| 17. Ammonium ion                                  | 34. Isoamylamine     |

