

## Malachite Green

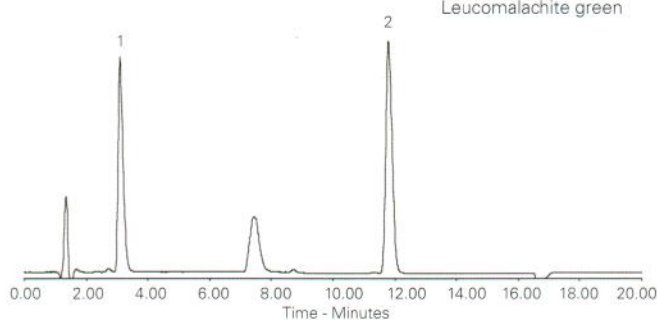
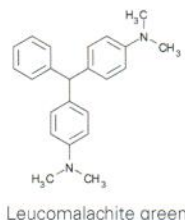
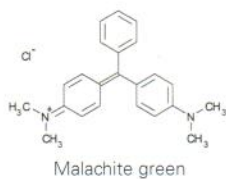
Application #AN2860

### Conditions

**Column:** ACE 5 C18  
**Dimensions:** 150 x 3.0 mm  
**Part Number:** ACE-121-1503  
**Mobile Phase:** 10 mM oxalic acid pH 2.9 in H<sub>2</sub>O/MeCN (80:20 v/v)  
**Flow Rate:** 0.4 mL/min  
**Temperature:** Ambient  
**Detection:** UV-Vis, 618 nm

### Analytes

1. Malachite green
2. Leucomalachite green



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## Maleic and Fumaric Acids

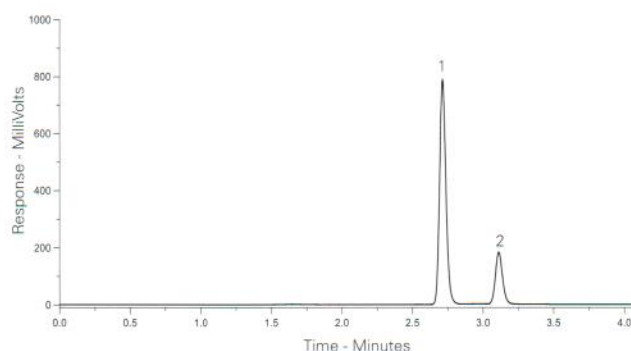
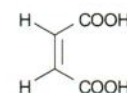
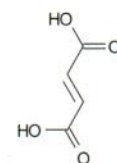
Application #AN3230

### Conditions

**Column:** ACE 5 AQ  
**Dimensions:** 250 x 4.6 mm  
**Part Number:** ACE-126-2546  
**Mobile Phase:** 50 mM KH<sub>2</sub>PO<sub>4</sub> pH 7.0 in H<sub>2</sub>O  
**Flow Rate:** 1 mL/min  
**Temperature:** Ambient  
**Detection:** UV, 210 nm

### Analytes

1. Fumaric acid
2. Maleic acid



## MDMA (Ecstasy) and PMA (Dr Death) Separation

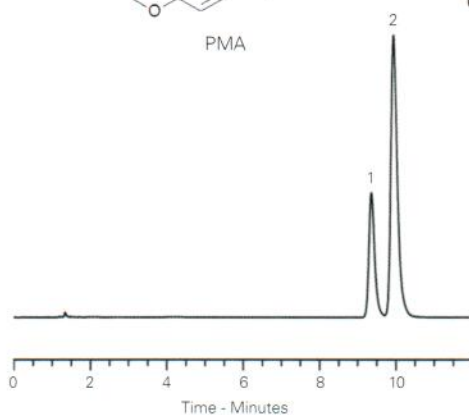
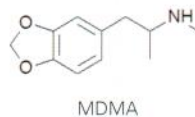
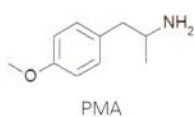
Application #AN4220

### Conditions

**Column:** ACE 3 C18  
**Dimensions:** 150 x 4.6 mm  
**Part Number:** ACE-111-1546  
**Mobile Phase:** 0.05 M KH<sub>2</sub>PO<sub>4</sub> pH 3.2 in H<sub>2</sub>O/MeCN (90:10 v/v)  
**Flow Rate:** 1.2 mL/min  
**Injection:** 10 µL  
**Temperature:** 22 °C  
**Detection:** UV, 210 nm

### Analytes

1. PMA (4-Methoxyamphetamine)  
LOD 0.08 µg/mL  
LOQ 0.26 µg/mL
2. MDMA (3,4-Methylenedioxy methamphetamine)  
LOD 0.04 µg/mL  
LOQ 0.12 µg/mL



Cumba LR, Smith JP, Zuway KY, Sutcliffe OB, do Carmo DR, Banks CE. Forensic electrochemistry: simultaneous voltammetric detection of MDMA and its fatal counterpart 'Dr Death' (PMA). Anal. Methods, 8, 142-152 (2016) doi: 10.1039/c5ay02924d

## Melamine using Ion-Pairing Reagent

Application #AN2510

### Conditions

**Column:** ACE 5 C8  
**Dimensions:** 150 x 4.6 mm  
**Part Number:** ACE-122-1546  
**Mobile Phase:** 5 mM heptafluorobutyric acid/MeCN (95:5 v/v)  
**Flow Rate:** 1 mL/min  
**Injection:** 5 µL  
**Temperature:** Ambient  
**Detection:** UV, 240 nm

### Analyte

1. Melamine

