

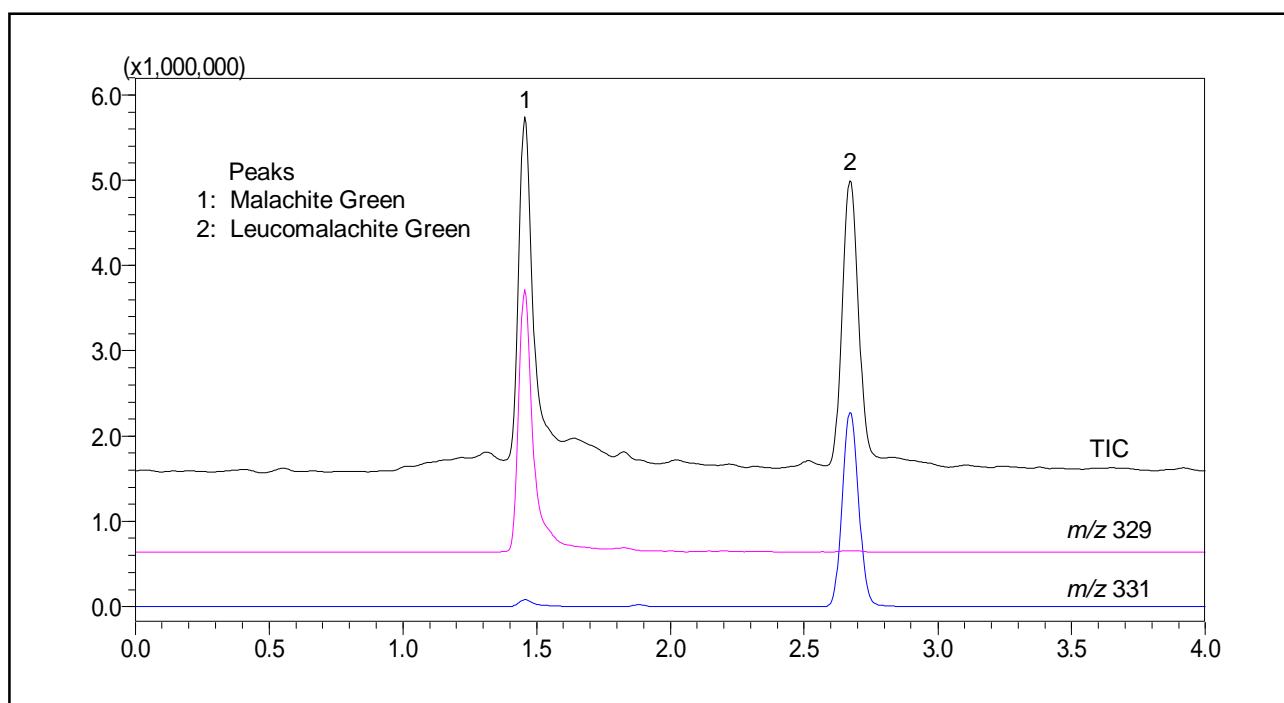
# Application Data Sheet

High Performance Liquid Chromatography

No. 34

## High-Speed Analysis of Malachite Green and Metabolites

Malachite Green has been used in the treatment of aquarium fish for ichthyophthirius disease (white spot disease), however, its use in Japan for the farming of food fish is not allowed. Here, we used an LCMS to perform simultaneous analysis of Malachite Green and its metabolite, Leucomalachite Green. Positive ions for each component were detected.



### Analysis of Malachite Green and Leucomalachite Green

#### [Sample Preparation]

A 1 mg/L concentration solution of each standard sample was prepared using Acetonitrile.

#### Analysis Conditions

Instrument	: Prominence UFLC system + LCMS-2010EV
Column	: Shim-pack XR-ODS (75 mm x 2.0 mm <i>i.d.</i> )
Mobile Phase	: A) 5 mmol/L ammonium acetate (pH 5.0) B) Acetonitrile B.conc; 10%~80% (0~1 min), 80% (1~4 min)
Flow Rate	: 0.5 mL/min
Column Temperature	: 40 °C
Detection	: MS; ESI-Positive, Scan
Sample Volume	: 2 µL