

# **Mixed analytical Standard**

## **Product Information**

| Cat. No.      | Amount              |
|---------------|---------------------|
| MC-LR-RR-YR-a | 1 mL (5 µg each/mL) |

### **Product Specifications**

| Molecular            | MC-LR:  | $C_{49}H_{74}N_{10}O_{12}$ |
|----------------------|---|----------------------------|
| Formulae             | MC-RR:  | $C_{49}H_{75}N_{13}O_{12}$ |
|                      | MC-YR:  | $C_{52}H_{72}N_{10}O_{13}$ |
| Molecular<br>Weights | MC-LR:  | 994.6 g/mol                |
|                      | MC-RR:  | 1037.6 g/mol               |
|                      | MC-YR:  | 1044.5 g/mol               |
| Purity               | >95 % (HPLC)  |                            |
| Source               | <i>M. aeruginosa</i> strain   |                            |
| Form                 | solution of 5 µg each/mL in<br>methanol                                     |                            |
| Shipping             | Ambient   |                            |
| Long Term<br>Storage | - 20°C  |                            |
| Shelf life           | 24 months   |                            |
| Stability            | The analytical standard should be used immediately after the vial is opened |                            |
|                      |   |                            |

### Description

Cyclic heptapeptide toxins isolated from the freshwater cyanobacterium *Microcystis aeruginosa*.<sup>1</sup>

The mixed analytical standard is dissolved in 100% methanol and ready to use for calibration. It is distributed in amber glass vials containing around 5  $\mu$ g of each microcystin in 1 ml MeOH. The concentration of the microcystins each lot is determined spectrophotometrically, confirmed by HPLC, and stated on the Certificate of Analysis.

#### For research use only!

Not available for sale to end-users without signing an end-use-certificate as required by German and international law.

 Blom et al., High grazer toxicity of [D-Asp3,(E)-Dhb7]-microcystin-RR of *Planktothrix rubescens* as compared to different microcystins, *Toxicon* 2001, 1923-1932

Höger et al., Analytical and Functional Characterization of Microcystins [Asp3]MC-RR and [Asp3,-Dhb7]MC-RR: Consequences for Risk Assessment?, *Environ. Sci. Technol.* 2007, 2609-2616