



DHI LAB PRODUCTS

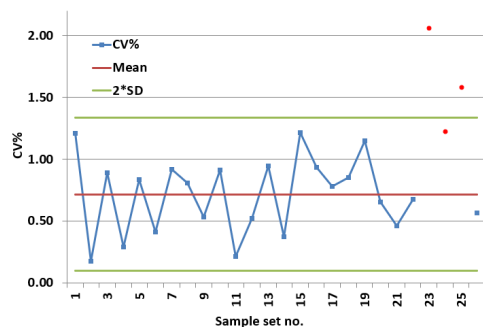
DHI MIXED PIGMENTS

Pigment Mixture Vials for QA/QC Applications

When monitoring phytoplankton by analyzing their pigments by High-Performance Liquid Chromatography (HPLC), QA/QC procedures should be conducted systematically to ensure that predefined quality standards and performance metrics are met, and that the HPLC is performing as expected.

QA/QC MEASURES CAN HELP YOU TO:

- Control how effectively the HPLC elutes and separates the pigments
- Verify the identity of the pigments
- Assess the precision of the HPLC through repeated injections (see figure below)
- Monitor accuracy over time to validate calibration and the analytical method



Coefficient of variation (CV%) of DHI mixed pigments was determined from three injections for each data set. Three instances (indicated by red squares) showed an increase in CV%.

After correcting a fault in the HPLC auto-injector the CV% returned to normal levels.

VIALS WITH PIGMENT MIXTURES

Ready-to-use vials with dissolved mixed pigments can be used for daily checks of HPLC performance:

PPS-MIX-1: Especially suitable for analysing phytoplankton pigments in meso-eutrophic or eutrophic waters. The chlorophyll *a* concentration is 3-5 µg/mL and this mixture contains more than 30 pigments.

PPS-MIX-2: Recommended for analysing samples with pigment concentrations near the detection limit, e.g., from oligotrophic areas. The chlorophyll *a* concentration is 0.1-0.3 µg/mL and the mixture contains more than 30 different pigments.

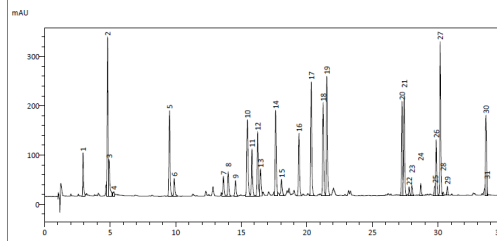
PPS-MIX-3: Contains fewer than 20 different pigments distributed across the chromatogram. It is suitable for simpler analyses when detection of all aquatic pigments is not required. The chlorophyll *a* concentration is 3-5 µg/mL.



DHI MIXED PIGMENTS

FEATURES

- Vials with mixed pigments dissolved in 1 mL 90% acetone
- Distributed in sealed HPLC vials with a nitrogen atmosphere
- Delivered with a Certificate-of-Analysis showing the elution order and the pigment content



DHI PIGMENT STANDARDS

We produce more than 45 different pure pigment standards, especially suitable for HPLC calibration when analyzing phytoplankton pigments.



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