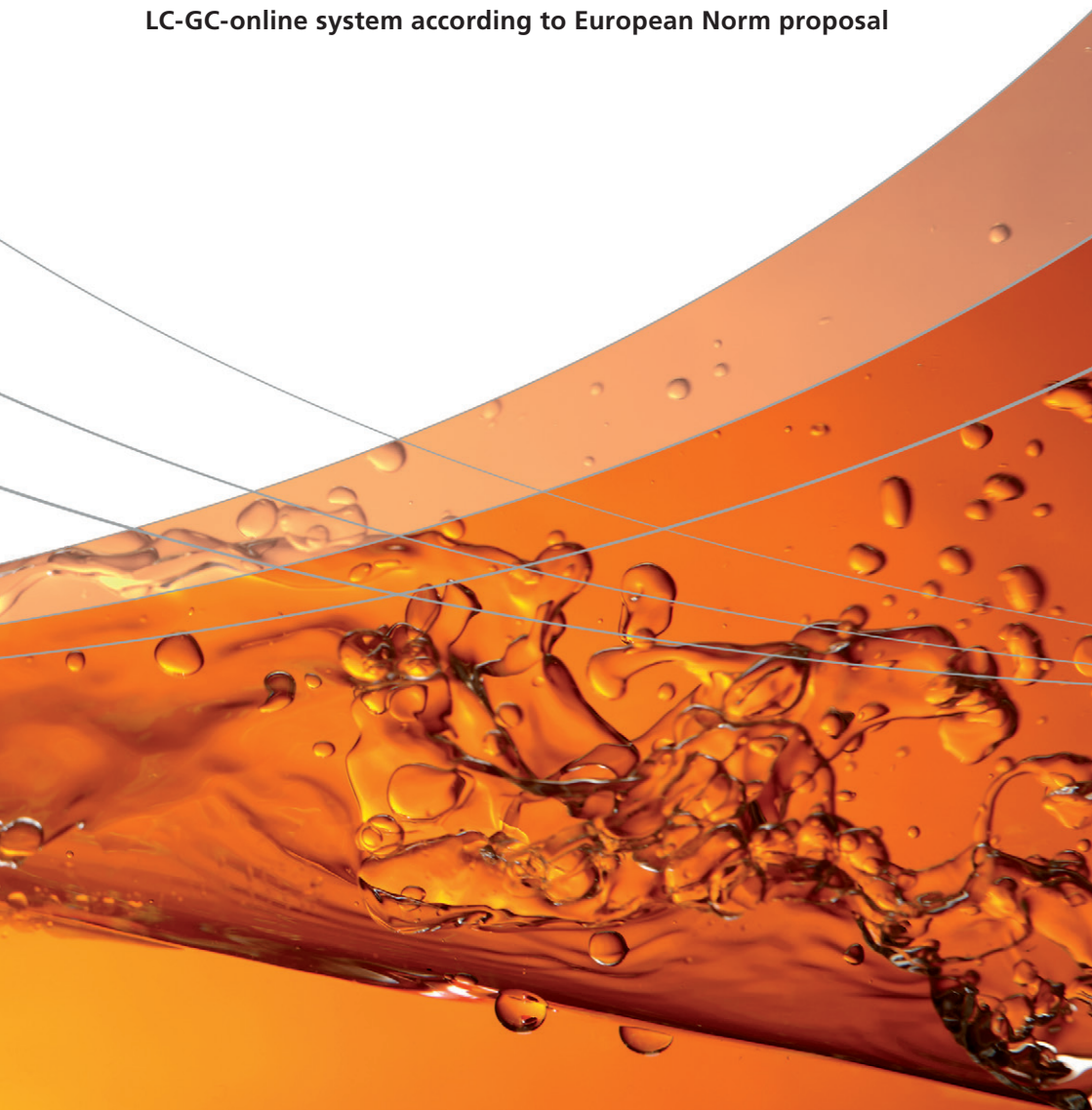


MOSH/MOAH analyzer for food and food packagings

LC-GC-online system according to European Norm proposal



MOSH/MOAH Analyzer

Routine-capable LC-GC system for on-line determination of mineral oil contaminations in food and food packaging materials as well as in livestock feed.

Why MOSH/ MOAH Analysis?

Fatty components in cosmetics, food and transport packaging materials and printing colors for packagings – mineral oil components such as MOSH/MOAH can be identified almost everywhere in the environment. They can infiltrate food of both plant and livestock origin in different ways, e.g. through migration. Both compounds, the mineral oil saturated hydrocarbons (MOSH) and also the mineral oil aromatic hydrocarbons (MOAH) are easily absorbed from food and can accumulate in body fat and organs. At present, it cannot be excluded that MOAH fractions may contain carcinogenic compounds.

National governments, particularly ministries of food and agriculture, are pressing the EC for defining of maximum allowable concentrations of MOSH/MOAH in food and food packaging.

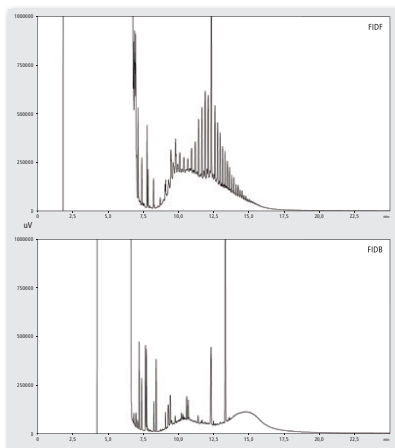
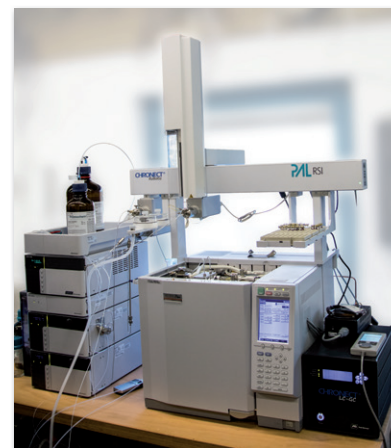


Figure 1: Chromatogram of MOSH/MOAH in food and food packaging

Getting on the safe side: LC-GC-online system according to European Norm

Shimadzu's MOSH/MOAH analyzer puts manufacturers of food and food packagings on the safe side. The MOSH/MOAH analyzer has been designed specifically for sensitive and fast detection of mineral oil contaminations based on the draft version of the European Norm 16995:2016. The system combines LC and GC technology with flame ionization detection (FID) for a highly efficient analysis covering preparation, pre-separation and automated processes.

System Features



LC-GC online system

Simultaneous and fast determination of MOSH and MOAH in just 30 minutes.

High level of automation

An automated sample preparation and pre-separation is realized by normal phase HPLC. MOSH and MOAH fractions are separated from one

another and simultaneously from interfering components such as paraffin or wax esters. Standard sample preparation steps such as solid phase extraction or manual purification are no longer required. Sensitive determination for the most effective detection of MOSH and MOAH levels in food and food packaging is possible.

High levels of reproducibility and accuracy

High measuring accuracy through validated method, similar to a normal split/ splitless injection.

Routine-capable methods

A proper combination of LC and GC reduces solvent consumption and contamination of the GC system. Additionally, it increases the stability of the system. Sample throughput is higher and facilitated by the control through the user-friendly CHRONOS software.

System Configuration

PARTNUMBER	DESCRIPTION
221-47159	COLUMN HANGER
221-73020-59	GC-2010 Plus AF IVD ready
221-73345-48	FID-2010 Plus (230 V)
223-07703-92S1	LabSolution Software Single GC
223-07706-91	LabSolutions – Add. LC option
221-73356-91	Adapter H2
221-70162-94	FID JET 0.8 mm
228-35397-92	RS-232C CABLE.2MT
228-45011-59	CBM-20A LITE
228-45018-58	DGU-20A3R
228-45041-91	RESERVOIR TRAY
228-45130-58	SPD-20A UFLC UV Detector
228-45137-58	LC-20ADXR
228-45137-58	LC-20ADXR
228-45209-41	MR MIXER 20µL
980-10221	SCAT SAFETY CAP 1 GL45
980-10221	SCAT SAFETY CAP 1 GL45
980-10223	SCAT SAFETY WASTE SET
980-20077	MOSH/MOAH accessory (SEMRAU CHRONECT® LC-GC parts)
980-20078	MOSH/MOAH add-on for epoxidation
980-20079	MOSH/MOAH add-on for fraction collection

For more information please contact us:



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