

Primacs^{MCS}

add-on module for TOC Analysis



The Primacs^{MCS} has been designed as an add-on module for Total Organic Carbon (TOC) analysis in solid samples such as soil, sediments and sludge.

The Skalar Primacs^{MCS} operates in combination with the Skalar Formacs^{series} TOC analyzer. This combination offers an economical solution to environmental, industrial and agricultural laboratories for TOC analysis of aqueous samples as well as solid materials.

Total Carbon (TC) is determined by catalytic oxidation of the sample at 1100°C, which converts the carbon in the sample to carbon dioxide (CO₂). The CO₂ is dispersed into the carrier gas and measured by a Non-Dispersive Infrared Detector (NDIR). The NDIR detector is located in the Formacs^{series} TOC analyzer.

Total Inorganic Carbon (TIC) is determined by acidification and purging of the sample in the TIC reactor converting the TIC to CO₂, which is measured by the NDIR.

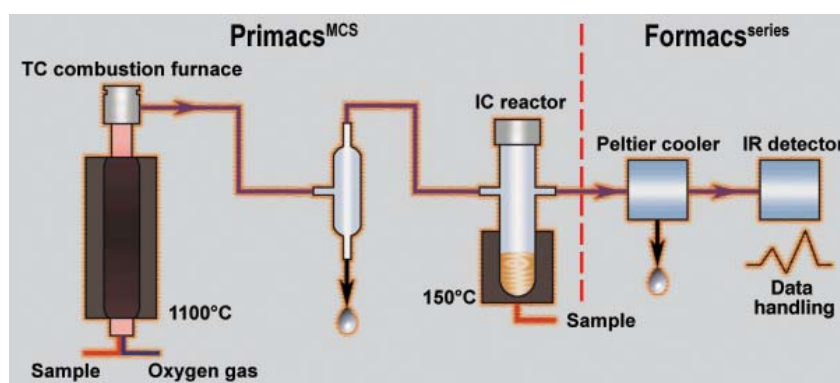
The Microsoft Windows® based Primacs software collects the data and calculates the TOC concentration of the samples by subtraction (TC - TIC = TOC).

FEATURES

- Measurement of TC, TIC and TOC
- Reusable quartz crucibles
- Economical concept
- Sample weights up to 3 grams
- Automatic balance interfacing
- Unique vertical sample introduction system

TYPICAL APPLICATIONS:

- Waste incinerators
- Agricultural analysis
- Fertilizer production
- Pharmaceutical swabs
- Others



Skalar

your partner in chemistry automation

Primacs^{MCS}

add-on module for TOC Analysis

Specifications



General Characteristics

- Analytes	Total Carbon, Total Inorganic Carbon, Total Organic Carbon
- Method	TC: High temperature catalytic combustion, adjustable 50 – 1100 °C IC: Inorganic carbon release by acidification at temperatures up to 150°C
- Samples	Soil, plant, sediment, sludge, waste, swab method for cleaning validation
- Sample introduction	Unique vertical bottom to top sample introduction system
- Crucibles	Re-usable quartz
- Regulations	Complies with international regulations such as ISO 10694, EN 13137 and EN 13639
- Features	Automatic balance interfacing

Operational and Performance Characteristics

- Measuring range	0.02 – 100%
- Analytical Range	0.5 – 40 mg C Absolute
- Analysis time	Approx. 3 - 5 minutes
- Sample size	Solid samples: up to 3 gram (300-500 mg nominal)
- Furnace Temperature	Up to 1100°C (TC furnace) - Up to 150°C (IC furnace)
- Reproducibility	< 2 % RSD, FSD (full scale deflection)
- Data processing	Area calculation

Physical Characteristics

- Gas Combustion	Oxygen analytical grade ≥ 3.5 (containing less than 10 ppm CO ₂)
- Power requirements	100 – 120 V, 220 – 240 V, 50/60 Hz
- Dimensions (hxdxw)	73 x 30 x 40 cm
- Weight	20 kg

Skalar's Headquarter Skalar Analytical B.V.

Tinstraat 12
4823 AA Breda
The Netherlands
T. +31 (0)76 5486 486
F. +31 (0)76 5486 400
E. info@skalar.com

USA Headquarters Skalar, Inc.

5012 Bristol Industrial Way # 107
Buford, GA 30518
Toll Free: 1 800 782 4994
T. + 1 770 416 6717
F. + 1 770 416 6718
E. Info@skalar-us.com

Canada Skalar, Inc.

Unit # 200, 270 Orenda Road
Brampton, L6T 4X6
Toll Free: 1 800 782 4994
T. + 1 770 416 6717
F. + 1 770 416 6718
E. Info@skalar-us.com

Germany Skalar Analytic GmbH

Gewerbestraße Süd 63
41812 Erkelenz
Germany
T. + 49 (0)2431 96190
F. + 49 (0)2431 96190
E. info.germany@skalar.com

United Kingdom Skalar (UK) Ltd.

8 Warren Yard, Warren Park
Wolverton Mill
Milton Keynes,
Buckinghamshire, MK12 5NW
T. + 44 (0)1908 410168
E. info.uk@skalar.com

France Skalar Analytique S.A.R.L.

35 - 37, rue Berthollet
94110 Arcueil
France
T. + 33 (0)1 4665 9700
F. + 33 (0)1 4665 9506
E. info.france@skalar.com

Asia / Middle East Skalar Analytical India Pvt. Ltd.

No. 7/4, Pappathiammal Street
Jain Colony, Kodambakkam
Chennai - 600024 - India
T. + 9144 2483 7007
F. + 9144 2483 6006
E. info.skalarindia@skalar.com

Czech Republic Carbon Instruments s.r.o.

Nademlejská 600
198 00 Praha 9
Czech Republic
T. + 420 242 481 706
E. info@skalar.com



ISO 9001 Certified
ISO 14001 Certified

For more information please contact your local Skalar agent or Skalar's headquarters in the Netherlands

Internet: www.skalar.com - ©Copyright Skalar 2018 - Publication No. 0406007E. US

Skalar reserves the right to change the specifications and the appearance of the equipment without further notification.