

Determination of hydrocarbon index

The hydrocarbon index is defined as the total of all organic substances that can be extracted with hexane, but cannot be absorbed in Florisil® (magnesium sulphate). On a covalent GC column, these elute between n-decane and n-tetracontane and have a boiling range of 175-525 °C. These include heating oils, diesel fuels, kerosene, lubricants and transmission fluids. Benzenes are not detected using this method.

ROTH offers an extensive range of products for the determination of the hydrocarbon index in accordance with EN ISO 9377-2-Mod. (DIN H53).



Standards

The standard solutions are produced according to ISO Guide 34 in an accredited environment. The solutions are tested in a laboratory accredited to ISO/IEC 17025 and supplied with a detailed, batch-specific certificate of analysis. The standards are intended for calibration of GC-FID, GC-TCD, GC-ECD, GC-MS, GC-MS-MS, LC-UV, LC-MS and LC-MS-MS.

Product	Purity	Art. No.	Pack Qty.	Packaging
n-Alkane standard solution (C10-C40, all even)	16 components (each 50 mg/l) in n-hexane	1772.1	1 ml	glass ampoule
	16 components (each 100 mg/l) in n-hexane/petroleum ether (1/1)	1772.2	5 ml	glass ampoule
		9331.1	5 ml	glass ampoule
n-Alkane standard solution (C7, C8, C9, C10-C40, all even)	19 components (each 50 mg/l) in isooctane	9629.1	5 ml	glass ampoule
Extraction solvent stock solution	20 µl/l n-decane and 20 mg/l n-tetracontane in n-hexane	1750.2	10 ml	glass ampoule
Florisil® quality control standard	1000 mg/l mineral oil and 1000 mg/l diesel in n-hexane	9334.1	5 ml	glass ampoule
Standard mixture of mineral oils	5000 mg/l mineral oil and 5000 mg/l diesel in n-hexane	1773.2	5 ml	glass ampoule
Standard mixture of mineral oils	500 mg/l mineral oil and 500 mg/l diesel in acetone	1774.2	5 ml	glass ampoule
Stearyl stearate test solution	2000 mg/l in n-hexane	1760.2	10 ml	glass ampoule

Determination of hydrocarbon index

GC capillary column ROTI®CAP-5 HT



Silarylene Phase

- **Non-polar**
- Selectivity similar to a 5 % phenyl - 95 % methylpolysiloxane phase
- Very low column bleed
- Solvent rinsing applicable
- **Working temperature limits:**
380 °C for isothermal operation
400 °C for short isothermal operation in a temperature programme
- **Application areas:** simulated distillation; hydrocarbon, fuel, oil analysis; high boiling analytes; ideal for MS detectors

- **Similar phases:** DB-5HT, VF-5HT, HT-5, XTI-5HT, ZB-5HT
- Equivalent to USP phases G27/G36

Length (m)	Inside Ø (mm)	Film thickness (µm)	Art. No.	Pack Qty.
15	0,25	0,1	3883.1	1
15	0,25	0,25	3885.1	1
15	0,32	0,1	3884.1	1
15	0,32	0,25	3888.1	1
30	0,25	0,1	3889.1	1
30	0,25	0,25	3891.1	1
30	0,32	0,1	3890.1	1
30	0,32	0,25	3892.1	1

SPE-glass column CHROMABOND® Na₂SO₄/ Florisil®



Extraction of hydrocarbons from water according to DIN H53 / ISO DIS 9377-4
Special combination phase of sodium sulphate and Florisil®

Recommended application:
Hydrocarbons from drinking, surface and waste water

Volumen (ml)	Füllmenge (mg)	Best.-Nr.	VE (Stück)
6	2000/2000	N744.1	30
6	2000/2000	N744.2	250 (5x50)

Florisil®

for Hydrocarbon Index analysis,
60-100 mesh

For Hydrocarbon Index determination according to EN ISO 9377-2 (H53).

Magnesium silicate
MgO · 3,6 SiO₂ · 1,53 OH

Type analysis:

Magnesium oxide (MgO)~15,5 %
Sodium sulphate (Na₂SO₄)~0,5 %
Adapted for EN ISO 9377-2 (H53)



CN39.1	100 g	plastic	29,90 €
CN39.3	500 g	plastic	122,90 €
CN39.2	1 kg	plastic	105,90 €

Chemicals for determination of the hydrocarbon index

Product	Purity	Art. No.	Pack Qty.	Packaging
Acetone	≥99,9 %, Pestilyse® plus	7535.1	2,5 l	glass
n-Hexane	≥95 %, GC Ultra Grade	KK48.1	2,5 l	glass
		T165.2	1 l	glass
	≥97,5 %, Pestilyse®	T165.1	2,5 l	glass
		T165.3	4 l	glass
Hydrochloric acid 25 %	≥96 %, Pestilyse® plus	7567.1	2,5 l	glass
		6331.1	1 l	glass
	≥25 %, p.a., ISO	6331.3	1 l	plastic
		6331.2	2,5 l	glass
Magnesium sulphate heptahydrate		6331.4	2,5 l	plastic
	≥99 %, p.a., ACS	P027.1	500 g	plastic
		P027.2	1 kg	plastic
		P027.3	2,5 kg	plastic
Petroleum ether 40-60 °C	Pestilyse® plus	7588.1	2,5 l	glass
		T170.2	1 l	glass
	Pestilyse®	T170.1	2,5 l	glass
		T170.3	4 l	glass
Sodium sulphate	≥99 %, p.a., ACS, granules, anhydrous	0966.1	500 g	plastic
		0966.2	1 kg	plastic
		0966.3	5 kg	plastic

For safety information and product specification, see our current catalogue or at www.carlroth.com

Contact international

Carl Roth GmbH + Co. KG
Tel.: +49 (0)721 5606-0
Fax: +49 (0)721 5606-149

Schoemperlenstr. 3-5
D-76185 Karlsruhe
www.carlroth.com

Contact Netherlands

Tel.: 0180/51 67 04
Fax: +49 721/56 06-260
bestellingen@carlroth.nl
www.carlroth.nl

Carl Roth GmbH + Co. KG · Schoemperlenstr. 3-5 · D-76185 Karlsruhe

De algemene verkoop- en leveringsvoorwaarden van Carl Roth GmbH + Co. KG, Karlsruhe zijn van toepassing.
Les conditions générales de vente et de livraison de Carl Roth GmbH + Co. KG, Karlsruhe sont en vigueur.

Contact Belgium

Tel.: 03 283 47 10 (Vlaanderen & Brussel) · Fax: +49 721/5606-260
Tél.: 080 447 958 (Wallonie & Bruxelles) · Fax: +49 721/5606-259
bestellingen@carlroth.be · commandes@carlroth.be
www.carlroth.be

Contact Switzerland:

ROTH AG
Tel.: 061/712 11 60 · Fax: 061/712 20 21
info@carlroth.ch · www.carlroth.ch
Fabrikmattenweg 12 · 4144 Arlesheim

The General Terms and Conditions of ROTH AG apply.