Technical Note: 20079

TR-SimDist

TRACE GC Capillary Column

Key Words

- ASTM-D2887
- High Temperature
- Simulated Distillation

Introduction

The TR-SimDist column from Thermo Electron Corporation column has been specifically designed for simulated distillation analysis. This analysis places a heavy demand on the column due to the high oven temperatures required to elute the higher molecular weight hydrocarbons. With a temperature limit of 400°C, the TR-SimDist meets these requirements. The phase is strongly cross-linked and the stable bleed profile also allows for consistent background subtraction which is common practice.

Phase Type

100% Dimethyl Polysiloxane

Maximum Temperatures

400°C for films <1µm, 370°C for 2.65µm films

USP Category

N/A

Cross Reference of Competitor Phases

DB-HT Sim Dis, DB-2887, BPX1, Rtx-2887, HP-1, Petrocol 2887, Petrocol EX2887

Application

The example application shows the analysis of a hydrocarbon standard and demonstrates the low bleed of this simulated distillation column.

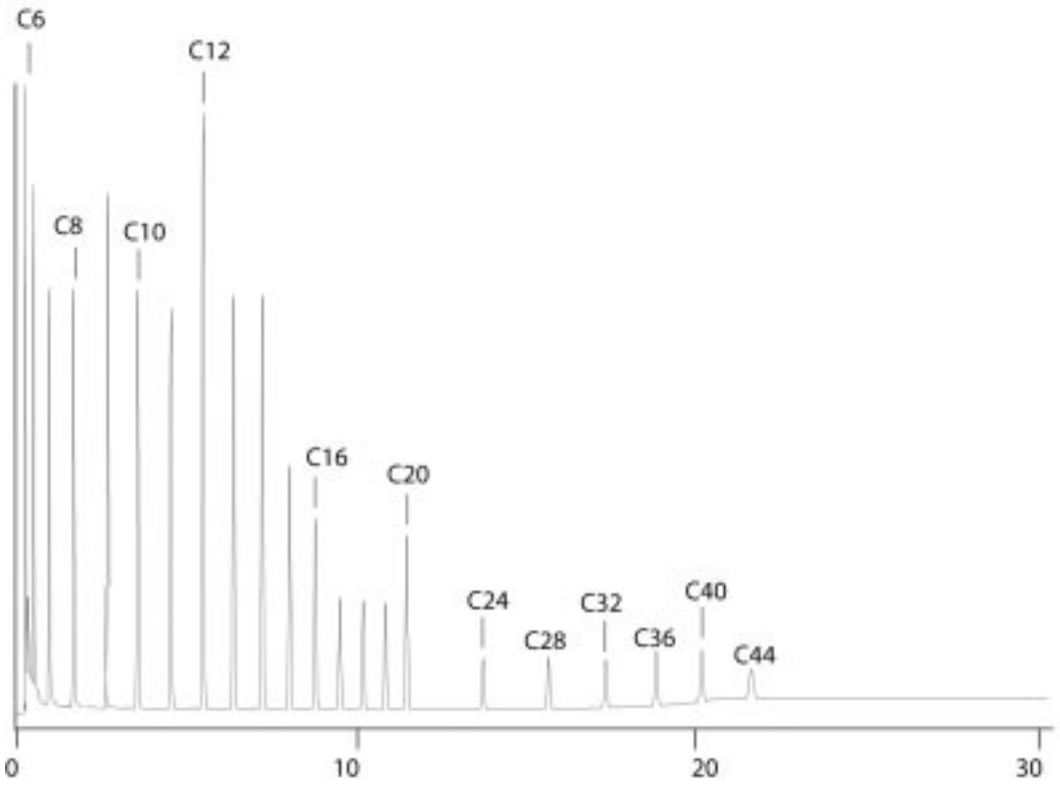
TR-SimDist Product Information

ID (mm)	FILM THICKNESS (µm)	LENGTH (m)	PART NO.
0.1	0.10	10	260S020P
0.53	0.10	10	260S025P
0.53	0.90	10	260S250P
0.53	2.65	6	260S347S
0.53	2.65	10	260S348P

Thermo ELECTRON CORPORATION

Analysis of Standard for D2887

Part No.: 260S348P
Phase: TR-SimDist, 2.65µm film
Column: 10m x 0.53mm ID
Initial Temp.: 40°C
Rate: 15°C/min
Final Temp.: 350°C, 10min
Detector Temp: 400°C
Carrier Gas: Helium, 20mL/min
Initial Temp.: 80°C
Rate: 15°C/min
Final Temp.: 350°C, 10min

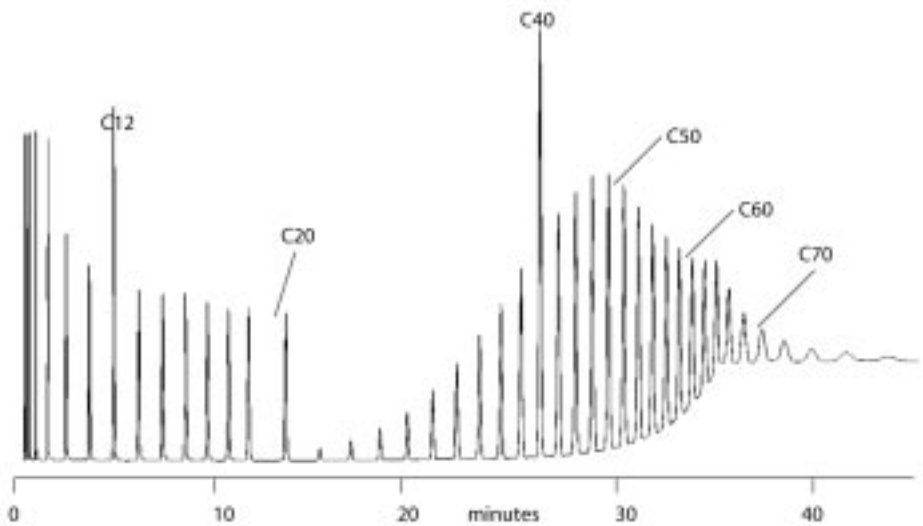


Retention Time Hydrocarbon Standard on TR-SimDist

Phase: TR-SimDist, 0.9µm film
Column: 10m x 0.53mm ID
Initial Temp: 40°C
Rate: 10°C/min
Final Temp: 390°C, 10min
Detector Temp: 400°C
Carrier Gas: Helium, 20mL/min
Column Part No.: 260S250P

Separation Systems Injector
Final Temp.: 390°C,10min
Initial Temp.: 80°C
Rate: 10°C/min

Note: No background subtraction was performed



In addition to these offices, Thermo Electron Corporation maintains a network of representative organizations throughout the world.

Australia
+61 2 9898 1244
Austria
+43 1 333 50340
Belgium
+32 2 482 30 30
Canada
+1 800 532 4752
China
+86 10 5850 3588
France
+33 1 60 92 48 00
Germany
+49 6103 4080
Italy
+39 02 950 591
Japan
+81 45 453 9100
Netherlands
+31 76 587 98 88
Nordic
+46 8 556 468 00
South Africa
+27 11 570 1840
Spain
+34 91 657 4930
Switzerland
+41 61 48784 00
UK
+44 1442 233555
USA
+1 800 532 4752

www.thermo.com

TN20079_E 08/04C

Thermo
ELECTRON CORPORATION