

# Halogenated hydrocarbons, $C_2 - C_2$

Analysis of halogenated hydrocarbons in hydrocarbon/water matrix

### **Application Note**

Environmental

#### Authors

Agilent Technologies, Inc.

#### Introduction

Volatile halogenated hydrocarbons can be measured at ppm level in a matrix of hydrocarbon/moisture with the ELCD detector. The use of the polar porous polymer Agilent PoraPLOT U column reduces the chance of co-elution of hydrocarbon with a halogenated compound, which results in an accuracy better than the 5% level.



#### Conditions

Technique	:	GC-wide-bore
Column	:	Agilent PoraPLOT U, 0.53 x 25 m fused silica PLOT PoraPLOT U (df = 20 $\mu m)$ (Part no. CP7584)
Temperature	:	150 °C
Carrier Gas	:	He, 80 kPa (0.8 bar, 11.9 psi)
Injector	:	Split, T = 200 °C
Detector	:	ELCD, 0.1.5220 in chloride mode Reactor gas: H <sub>2</sub> Reactor temp.: 850 °C Eleotr. solv.: n-propanol
Concentration range	:	1-4 ppm in 50% hydrocarbon/ 50% nitrogen
Courtesy	:	J. Luong, The Dow chemical Company, Fort Saskatewan, Canada

#### **Peak identification**

1.	chloromethane	1 ppm
2.	vinyl chloride	2 ppm
3.	chloroethane	3.5 ppm



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