

石脑油中有机含氧化合物的测定 气相色谱法

Determination of naphtha in oxygen-containing organic compounds by gas chromatography

Naphtha (Naphtha) also known crude gasoline: containing full and naphthalene alkane 55.4%, single ring alkane 30.3%, double 2.4% of alkanes, alkylbenzene 11.7%, 0.1% benzene, indene with 0.1%, the main raw material for ethylene production. In naphtha methyl tert butyl ether (MTBE), containing oxide belongs to the impurities, once cracking feedstock in the containing oxide content is higher than 1000 mg kg⁻¹, will lead to cracking of propylene and ethylene alcohol.

The method provides for the methyl tert butyl ether (MTBE), ethyl tert butyl ether (ETBE), tert amyl methyl ether (TAME), methanol, ethanol, organic containing oxygen compounds by gas chromatography method for the determination of naphtha.

This method is suitable for determination of naphtha of the oxygen-containing organic compounds determination range: 5mg/kg ~ 1000mg/kg.

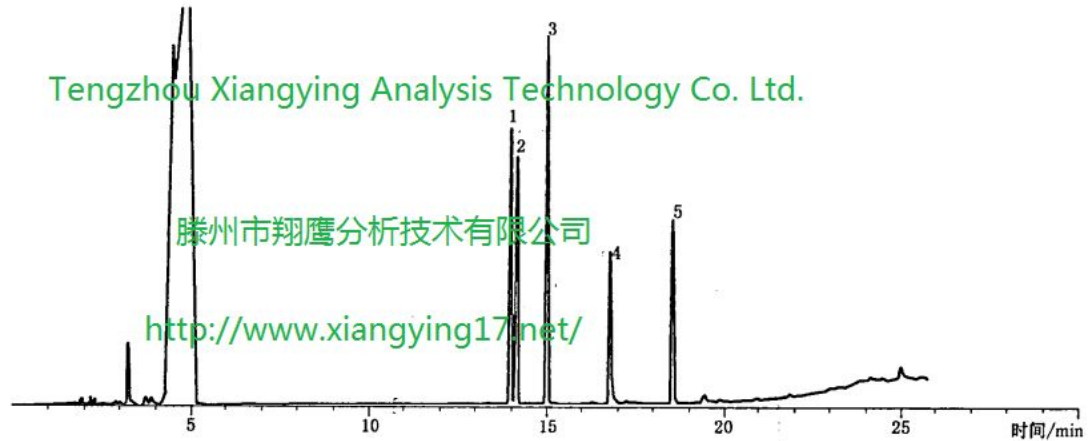
Tengzhou City Xiangying Analysis Technology Co., Ltd. the XiangyingGC7990plus gas chromatography determination in naphtha trace containing oxides, using a non tandem and independent separation of polar column and a polar column, completed within 30 min in naphtha trace containing oxides analysis. The system peak area reproducibility is good, and the RSD was less than 1.5%, quantitation limit and low limit of detection. The method is accurate and reliable.

石脑油(Naphtha)又称粗汽油:一般含烷烃 55.4%、单环烷烃 30.3%、双环烷烃 2.4%、烷基苯 11.7%、苯 0.1%、茚满和萘满 0.1%,是生产乙烯的主要原料.石脑油中的甲基叔丁基醚(MTBE)等含氧化物属于杂质,一旦裂解原料中这些含氧化物的含量高于 1000 mg · kg⁻¹,将会导致裂解后丙烯、乙烯中醇。

本方法规定了石脑油中甲基叔丁基醚(MTBE)、乙基叔丁基醚(ETBE)、叔戊基甲基醚(TAME)、甲醇、乙醇各有机含氧化合物的气相色谱测定方法。

本方法适用于石脑油中上述各有机含氧化合物的测定,测定范围:5mg/kg~1000mg/kg。

滕州市翔鹰分析技术有限公司利用 XiangyingGC7990plus 气相色谱法测定石脑油中的微量含氧化物,采用一根非极性柱和一根极性柱进行串联和独立分离,在 30 min 内完成石脑油中微量含氧化物分析.该系统峰面积重复性良好,RSD 小于 1.5%,检出限和定量限低,方法准确可靠.



说明：

- 1——乙基叔丁基醚(ETBE)；
- 2——甲基叔丁基醚(MTBE)；
- 3——叔戊基甲基醚(TAME)；
- 4——甲醇；
- 5——乙醇。

标准工作溶液的气相色谱图

XiangyingGC7990plus features:

- 1 excellent performance, competitive price, to meet the customers' choice
 - 2 multi industry adaptability
 - 3 outstanding performance in all kinds of harsh environment
- INJ

A variety of sampling ports can be equipped with: packed column inlet, shunt / non shunt capillary inlet,

Hydrogen flame ionization detector (FID)

Maximum use temperature: 400

The minimum detection limit: $-12 = 2.5 \times 10^{-12}$ g/s (n-C16)

Linear range: 107 (+ 10%)

XiangyingGC7990plus 特点:

- 1. 卓越的性能，具有竞争力的价格，满足广大客户的选择
- 2. 多行业适应性
- 3. 在各种苛刻环境下均表现出色

进样口

多种进样口可配：填充柱进样口、分流/不分流毛细管进样口、**氢火焰离子化检测器 (FID)**

最高使用温度：400°C

最小检出限： $\leq 2.5 \times 10^{-12}$ g/s (n-C16)

线性范围：107 (±10%)