

ASTM D4815 / D5580 – Analysis of Ethers and Alcohols, BTEX and Total Aromatics in Gasoline

Analyzer Description

Configuration:

1-valve, 2-column (micro-packed and capillary), FID with an optional TCD

Sample type:

Finished gasoline

Components separated:

D4815: MTBE, ETBE, TAME, DIPE, methanol, ethanol, isopropanol, n-propanol, isobutanol, tert-butanol, sec-butanol, n-butanol, tert-amylalcohol

ASTM D5580: Benzene, toluene, ethyl benzene, xylene, C₉ and heavier aromatics, total aromatics

Concentration range:

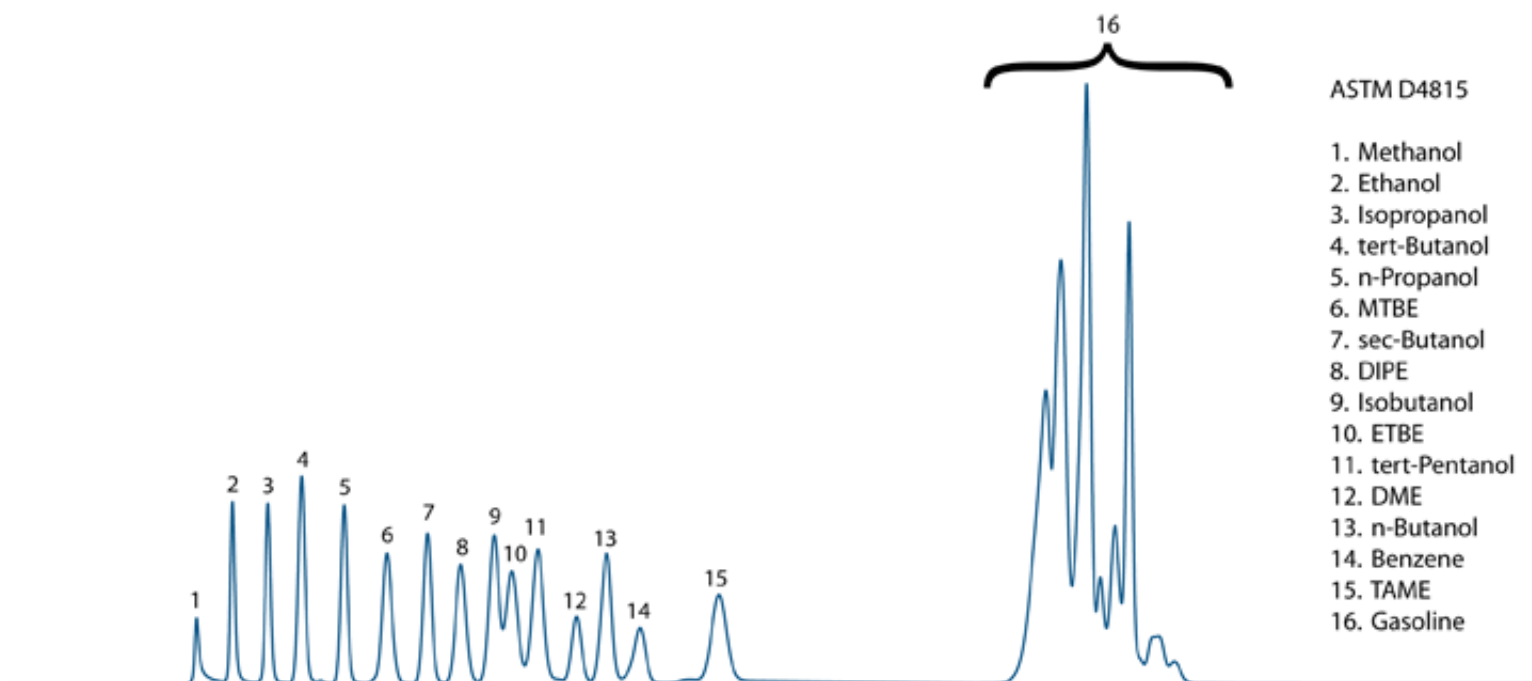
ASTM D4815: 0.1 to 20 wt% for individual ethers, 0.1 to 12 wt% for individual alcohols

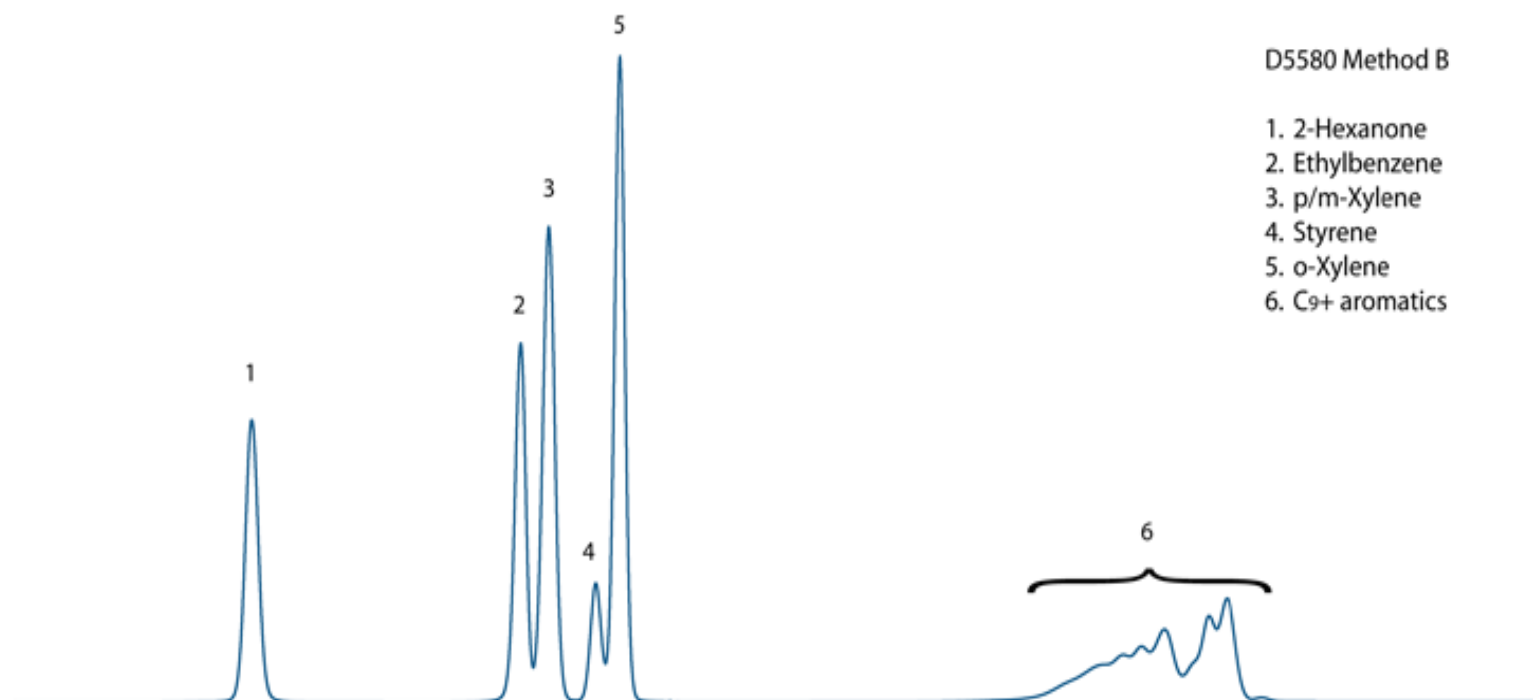
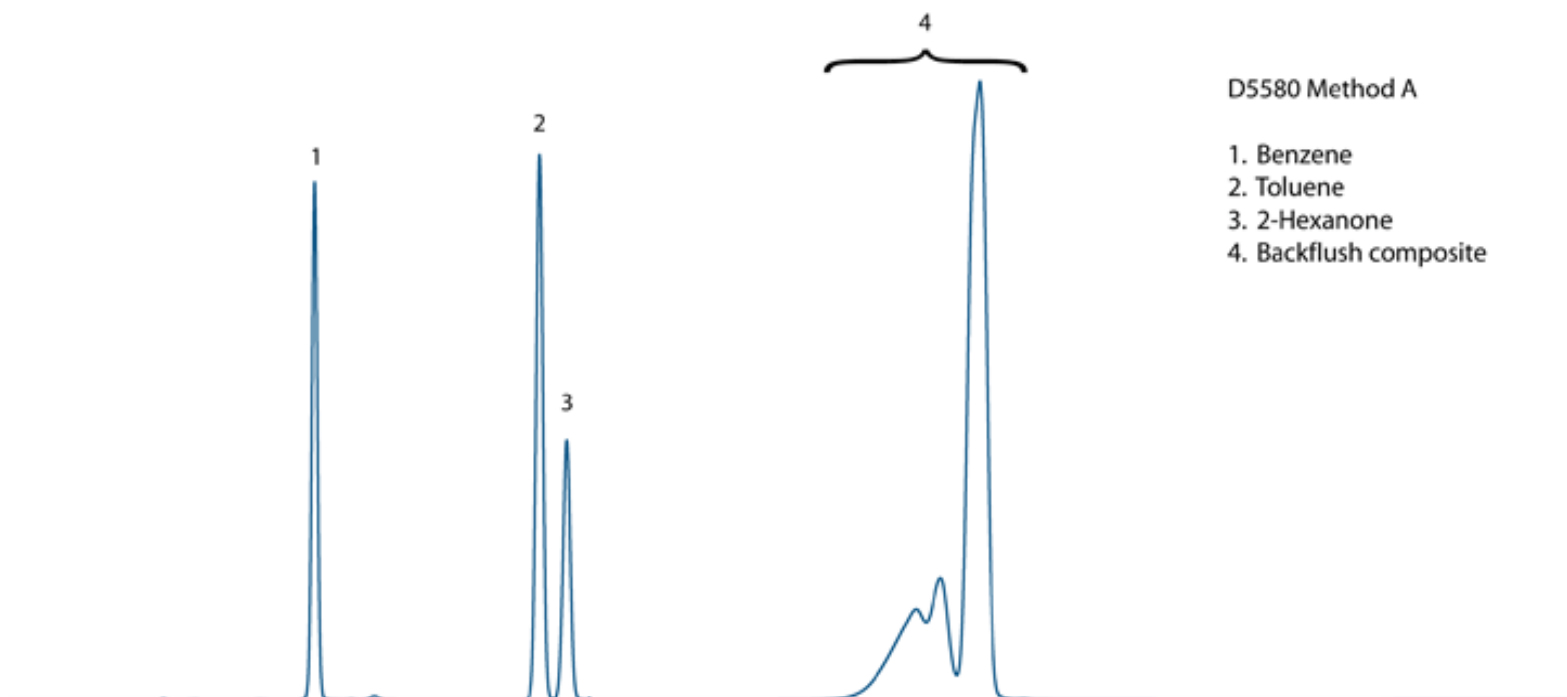
ASTM D5580: 0.1 to 5 vol% for benzene, 1 to 15 vol% for toluene, 0.5 to 10 vol% for individual C₈ aromatics, 5 to 30 vol% for total C₉ and heavier aromatics, 10 to 80 vol% for total aromatics

Methods met:

ASTM D4815, ASTM D5580, Wasson-ECE 258

Typical Chromatogram





Key Features and Benefits

- The same set of columns performs both methods
- ASTM D3606 may be added to the same instrument