

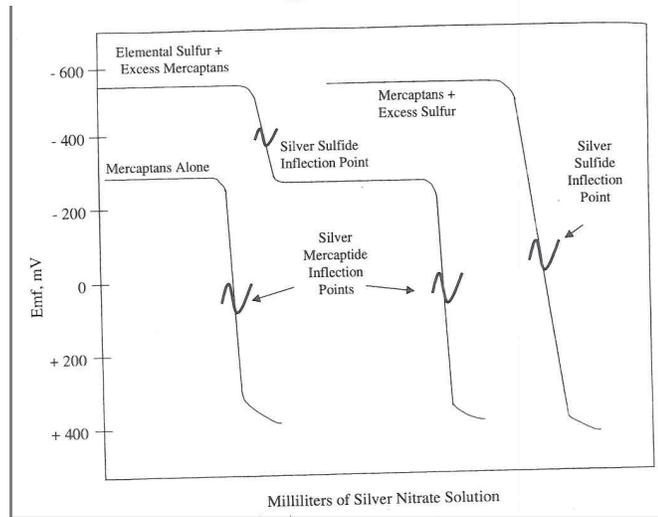
Method Abstract #9

Sulfur in Fuels

Scope and Application This method conforms to ASTM D3227. Sample types include gasoline, kerosene, aviation turbine, and distillate fuels.

Method Summary This test is specific in identifying thiol, also known as mercaptans; an organic compound containing a sulfur/hydrogen side chain. Combustion of sulfur-containing compounds in fuel leads to the production of sulfur oxides. These compounds are thought to contribute to aerosols and particulate formation. The detection of mercaptan sulfur is done through a precipitation titration using a dissolved fuel sample in alcoholic sodium acetate as the solvent and silver nitrate as the titrant.

Sample Titration Curve



* Titration curves of samples that contain different components (Annual book of ASTM Standards 2004. Volume 5.01, ASTM D3227, pg.1286)

Method Performance

Data forthcoming.