Quality Characteristic and Analysis of Residues for Circulated Automotive LPG in Domestic

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The quality characteristics and analysis of residues in circulated automotive LPG is reported in domestic. The quality of LPG is determined by composition, sulfur content, vapor pressure, density, residues, copper corrosion and water content. The residues amount in LPG is an important for quality control because it can accumulate in pipes, vaporizers, instruments, regulators, and injectors, resulting in mal-flow and misreading. The residue in LPG is extracted into acetonitrile and it was analyzed by gas chromatography-mass spectrometry (GC-MS) for components. The components of residues in LPG was detected 13 chemicals with C1~ C28. It was presumed that this residue had been originated from LPG fuel, parts of an automobile and lubricant oil in circulation.