Designation: D 1265 – 97

An American National Standard

Standard Practice for Sampling Liquefied Petroleum (LP) Gases (Manual Method)[1]

This standard is issued under the fixed designation D 1265; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice covers the procedures for obtaining representative samples of liquefied petroleum gases such as propane, butane, or mixtures thereof, in containers other than those used in laboratory testing apparatus. These procedures are considered adequate for obtaining representative samples for all routine tests for LP gases required by Specification D 1835 except analysis by Test Method D 2163. They are not intended for obtaining samples to be used for compositional analysis. A sample procedure that avoids changes in composition must be used for compositional analysis.

NOTE 1—Practice D 3700 describes a recommended method for obtaining a representative sample of a hydrocarbon fluid and the subsequent preparation of that sample for laboratory analysis.

1.2 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

D 1835 Specification for Liquefied Petroleum (LP) Gases[2]

D 2163 Test Method for Analysis of Liquefied Petroleum (LP) Gases and Propene Concentrates by Gas Chromatography[2]

D 3700 Practice for Containing Hydrocarbon Fluid Samples Using a Floating Piston Cylinder[3]

3. Summary of Practice

3.1 A liquid sample is transferred from the source into a sample container by purging the container and filling it with liquid, then providing 20 % outage so that 80 % of the liquid volume remains.

4. Significance and Use

4.1 Samples of liquefied petroleum gases are examined by various test methods to determine physical and chemical characteristics. The test results are often used for custody transfer and pricing determination. It is therefore essential that the samples be representative of the product to be tested.

5. General Information

5.1 Considerable effort is required to obtain a representative sample, especially if the material being sampled is a mixture of liquefied petroleum gases. The following factors must be considered:

5.1.1 Obtain samples of the liquid phase only.

5.1.2 When it is definitely known that the material being sampled is composed predominantly of only one liquefied petroleum gas, a liquid sample may be taken from any part of the vessel.

5.1.3 When the material being sampled has been agitated until uniformity is assured, a liquid sample may be taken from any part of the vessel.

5.1.4 Because of wide variation in the construction details of containers for liquefied petroleum gases, it is difficult to specify a uniform method for obtaining representative samples of heterogeneous mixtures. If it is not practicable to agitate a mixture for homogeneity, obtain liquid samples by a procedure which has been agreed upon by the contracting parties.

5.1.5 Directions for sampling cannot be made explicit enough to cover all cases. They must be supplemented by judgment, skill, and sampling experience. Extreme care and good judgment are necessary to ensure samples which represent the general character and average condition of the material. Because of the hazards involved, liquefied petroleum gases should be sampled by, or under the supervision of, persons familiar with the necessary safety precautions.

NOTE 2—Samples to be tested for presence of corrosive compounds or sulfur compounds should be taken in stainless steel containers equipped with stainless steel valves; otherwise, determinations of mercaptans and hydrogen sulfide, for example, can be misleading.

5.1.6 Hydrocarbon vapors vented during sampling must be controlled to assure compliance with applicable safety and environmental regulations.

[1] This practice is under the joint jurisdiction of ASTM Committee D-2 on Petroleum and Petroleum Productsand is the direct responsibility of Subcommittee D02.H on Liquefied Petroleum Gas.

Current edition approved Nov. 10, 1997. Published June 1998.. Originally published as D1265 – 53 T. Last previous edition D1265 – 92..

[2] *Annual Book of ASTM Standards*, Vol 05.01.

[3] *Annual Book of ASTM Standards*, Vols 05.02.