

§ 1065.240

40 CFR Ch. I (7-1-04 Edition)

TABLE 1 OF § 1065.220—TEST-FUEL SPECIFICATIONS FOR LIQUEFIED PETROLEUM GAS

| Item | Procedure ¹ | Value |
|---|--|------------------------------------|
| 1. Propane | ASTM D 2163-91 | 85.0 vol. percent minimum. |
| 2. Vapor pressure at 38° C | ASTM D 1267-02 or 2598-02 ² | 14 bar maximum. |
| 3. Volatility residue (evaporated temp., 35° C) | ASTM D 1837-02 | -38° C maximum. |
| 4. Butanes | ASTM D 2163-91 | 5.0 vol. percent maximum. |
| 5. Butenes | ASTM D 2163-91 | 2.0 vol. percent maximum. |
| 6. Pentenes and heavier | ASTM D 2163-91 | 0.5 vol. percent maximum. |
| 7. Propene | ASTM D 2163-91 | 10.0 vol. percent maximum. |
| 8. Residual matter (residue on evap. of 100 ml oil stain observ.) | ASTM D 2158-02 | 0.05 ml maximum pass. ³ |
| 9. Corrosion, copper strip | ASTM D 1838-91 | No. 1 maximum. |
| 10. Sulfur | ASTM D 2784-98 | 80 ppm maximum. |
| 11. Moisture content | ASTM D 2713-91 | pass. |

¹ All ASTM standards are incorporated by reference in § 1065.1010.
² If these two test methods yield different results, use the results from ASTM D 1267-02.
³ The test fuel must not yield a persistent oil ring when you add 0.3 ml of solvent residue mixture to a filter paper in 0.1 ml increments and examine it in daylight after two minutes (see ASTM D 2158-02).

(b) At ambient conditions, the fuel must have a distinctive odor detectable down to a concentration in air of not over one-fifth of the lower flammability limit.

§ 1065.240 Lubricating oils.

Lubricating oils you use to comply with this part must be commercially available and represent the oil that will be used with your in-use engines.

§ 1065.250 Analytical gases.

Analytical gases that you use to comply with this part must meet the accuracy and purity specifications of this section. You must record the expiration date specified by the gas supplier and may not use any gas after the expiration date.

(a) *Pure gases.* Use the “pure gases” shown in the following table:

TABLE 1 OF § 1065.250—CONCENTRATION LIMITS FOR PURE GASES

| Gas type | Maximum contaminant concentrations | | | | Oxygen content |
|--|------------------------------------|-----------------|----------------|-------------------|----------------|
| | Organic carbon | Carbon monoxide | Carbon dioxide | Nitric oxide (NO) | |
| Purified Nitrogen ... | 1 ppmC | 1 ppm | 400 ppm | 0.1 ppm | NA. |
| Purified Oxygen | NA | NA | NA | NA | 99.5–100.0%. |
| Purified Synthetic Air, or Zero-Grade Air. | 1 ppmC | 1 ppm | 400 ppm | 0.1 ppm | 18–21%. |

(b) *Fuel for flame ionization detectors.* Use a hydrogen-helium mixture as the fuel. Make sure the mixture contains 40 ± 2 percent hydrogen and no more than 1 ppmC of organic carbon or 400 ppm of CO₂.

(c) *Calibration and span gases.* Apply the following provisions to calibration and span gases:

(1) Use the following gas mixtures, as applicable, for calibrating and spanning your analytical instruments:

(i) Propane in purified synthetic air. You may ask us to allow you to use propane in purified nitrogen for high concentrations of propane.

(ii) CO in purified nitrogen.