

(ii) At 375 °F±10 °F (191 °C ±6 °C) immediately before the HFID. This will be determined by a temperature sensor located at the exit of the heated sample line. The sensor shall have an accuracy and precision of ±2 °F (1.1 °C).

(6) It is intended that the dilute exhaust gas flowing in the THC sample system be between 365 °F and 385 °F (185 °C and 197 °C).

(7) The requirements for the continuous HC measurement system are as follows:

(i) The system must use an “overflow” zero and span system. In this type of system, excess zero or span gas spills out of the probe when zero and span checks of the analyzer are made. The “overflow” system may also be used to calibrate the HC analyzer per §86.1321(b), although this is not required.

(ii) No other analyzers may draw a sample from the continuous HC sample probe, line or system, unless a common sample pump is used for all analyzers and the sample line system design reflects good engineering practice.

(iii) The overflow gas flow rates into the sample line shall be at least 105% of the sample system flow rate.

(iv) The overflow gases shall enter the heated sample line as close as practicable to the outside surface of the CVS duct or dilution tunnel.

[71 FR 77922, Dec. 27, 2006, as amended at 74 FR 61548, Nov. 25, 2009]

§ 86.210-94 [Reserved]

§ 86.211-94 Exhaust gas analytical system.

The provisions of §86.111-94 apply to this subpart, except that the NO_x ana-

lyzer is optional. The exhaust gas analytical system must contain components necessary to determine hydrocarbons, carbon monoxide, carbon dioxide, methane, and formaldehyde. The exhaust gas analytical system is not required to contain components necessary for determining oxides of nitrogen.

[71 FR 77923, Dec. 27, 2006]

§ 86.212-94 [Reserved]

§ 86.213-04 Fuel specifications.

Gasoline having the following specifications will be used by the Administrator except that the Administrator will not use gasoline having a sulfur specification higher than 0.0045 weight percent. Gasoline having the specifications set forth in the table in this section, or substantially equivalent specifications approved by the Administrator, may be used by the manufacturer except that the octane specification does not apply. In lieu of using gasoline having these specifications, the manufacturer may, for certification testing, use gasoline having the specifications specified in §86.113-04 provided the cold CO emissions are not decreased. Documentation showing that cold CO emissions are not decreased must be maintained by the manufacturer and must be made available to the Administrator upon request. The table listing the cold CO fuel specifications described in the text in this section follows:

TABLE—COLD CO FUEL SPECIFICATIONS

Item	ASTM test	Cold CO low octane value or range	Cold CO high octane ¹ value or range
(RON+MON)/2, min	D 2699	87.8±.3	92.3±0.5
Sensitivity, min	D 2699	7.5	7.5
Distillation range:			
IBP, deg.F	D 86	76–96	76–96
10% point, deg.F.	D 86	98–118	105–125
50% point, deg.F.	D 86	179–214	195–225
90% point, deg.F.	D 86	316–346	316–346
EP, max, deg.F	D 86	413	413
Sulfur, wt. %	D 3120	0.0015–0.008	0.0015–0.008
Phosphorous, g/U.S gal, max	D 3231	0.005	0.005
Lead, g/gal, max .....	.....	0.01	0.01
RVP, psi	D 4953	11.5±.3	11.5±.3
Hydrocarbon composition	D 1319.		

TABLE—COLD CO FUEL SPECIFICATIONS—Continued

Item	ASTM test	Cold CO low octane value or range	Cold CO high octane ¹ value or range
Olefins, vol. pct	12.5±5.0	10.0±5.0
Aromatics, vol. pct	26.4±4.0	32.0±4.0
Saturates	Remainder	Remainder.

¹ Gasoline having these specifications may be used for vehicles which are designed for the use of high-octane premium fuel.

[65 FR 6850, Feb. 10, 2000]

§ 86.213–11 Fuel specifications.

(a) *Gasoline-fueled light-duty vehicles and light-duty trucks.* Gasoline having the following specifications will be used by the Administrator except that the Administrator will not use gasoline having a sulfur specification higher than 0.0045 weight percent. Gasoline having the specifications set forth in the table in this section, or substantially equivalent specifications approved by the Administrator, may be used by the manufacturer except that

the octane specification does not apply. In lieu of using gasoline having these specifications, the manufacturer may, for certification testing, use gasoline having the specifications specified in § 86.113–04 provided the cold CO emissions are not decreased. Documentation showing that cold CO emissions are not decreased must be maintained by the manufacturer and must be made available to the Administrator upon request. The table listing the cold CO fuel specifications described in the text in this section follows:

TABLE—COLD CO FUEL SPECIFICATIONS

Item	ASTM test	Cold CO low octane value or range	Cold CO high octane ¹ value or range
(RON+MON)/2, min	D 2699	87.8±3	92.3±0.5.
Sensitivity, min	D 2699	7.5	7.5.
Distillation range:			
IBP, deg.F	D 86	76–96	76–96.
10% point, deg.F	D 86	98–118	105–125.
50% point, deg.F	D 86	179–214	195–225.
90% point, deg.F	D 86	316–346	316–346.
EP, max, deg.F	D 86	413	413.
Sulfur, wt. %	D 3120	0.0015–0.008	0.0015–0.008.
Phosphorous, g/U.S. gal, max	D 3231	0.005	0.005.
Lead, g/gal, max .....	.....	0.01	0.01.
RVP, psi	D 4953	11.5±3	11.5±3.
Hydrocarbon composition	D 1319.		
Olefins, vol. pct .....	.....	12.5±5.0	10.0±5.0.
Aromatics, vol. pct .....	.....	26.4±4.0	32.0±4.0.
Saturates .....	.....	Remainder	Remainder.

¹ Gasoline having these specifications may be used for vehicles which are designed for the use of high-octane premium fuel.

(b) *Petroleum-fueled diesel-cycle light-duty vehicles and light-duty trucks.* Diesel test fuel used for cold temperature FTP testing under part 600 of this chapter must be a winter-grade diesel fuel as specified in ASTM D975–04c “Standard Specification for Diesel Fuel Oils.” (incorporated by reference, see § 86.1) Such test fuel must also comply with the requirements of part 80 of this chapter. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428–2959. Copies may be inspected at U.S. EPA Headquarters Library, EPA West Building, Constitution Avenue and 14th Street, NW., Room 3340, Washington DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal_register/