

## Environmental Protection Agency

## § 79.50

(1) Hydrocarbon composition (aromatic content, olefin content, saturate content), with the methods of analysis identified;

(2) Polynuclear organic material content, sulfur content, and trace element content, with the methods of analysis identified;

(3) Distillation temperatures (90 percent point, end point);

(4) Cetane number or cetane index;

(d) In accordance with §§ 79.5(a)(2) and 79.11(f), and to the extent such information is known to the fuel manufacturer, he shall furnish summaries of any information developed by or specifically for him concerning the following items:

(1) Mechanisms of action of each additive he reports;

(2) Reactions between such additives and motor vehicle diesel fuel;

(3) Identification and measurement of the emission products of such additives when used in motor vehicle diesel fuel;

(4) Effects of such additives on all emissions;

(5) Toxicity and any other public health or welfare effects of the emission products of such additives.

Such submission shall be accompanied by a description of the test procedures used in obtaining the information. Information will be considered to be known to the fuel manufacturer if a report thereon has been prepared and circulated or distributed outside the research department or division.

### Subpart E [Reserved]

### Subpart F—Testing Requirements for Registration

SOURCE: 59 FR 33093, June 27, 1994, unless otherwise noted.

#### § 79.50 Definitions.

The definitions listed in this section apply only to subpart F of this part.

*Additive/base fuel mixture* means the mixture resulting when a fuel additive is added in specified proportion to the base fuel of the fuel family to which the additive belongs.

*Aerosol additive* means a chemical mixture in aerosol form generally used

as a motor vehicle engine starting aid or carburetor cleaner and not recommended to be placed in the fuel tank.

*Aftermarket fuel additive* means a product which is added by the end-user directly to fuel in a motor vehicle or engine to modify the performance or other characteristics of the fuel, the engine, or its emissions.

*Atypical element* means any chemical element found in a fuel or additive product which is not allowed in the baseline category of the associated fuel family, and an "atypical fuel or fuel additive" is a product which contains such an atypical element.

*Base fuel* means a generic fuel formulated from a set of specifications to be representative of a particular fuel family.

*Basic emissions* means the total hydrocarbons, carbon monoxide, oxides of nitrogen, and particulates occurring in motor vehicle or engine emissions.

*Bulk fuel additive* means a product which is added to fuel at the refinery as part of the original blending stream or after the fuel is transported from the refinery but before the fuel is purchased for introduction into the fuel tank of a motor vehicle.

*Emission characterization* means the determination of the chemical composition of emissions.

*Emission generation* means the operation of a vehicle or engine or the vaporization of a fuel or additive/fuel mixture under controlled conditions for the purpose of creating emissions to be used for testing purposes.

*Emission sampling* means the removal of a fraction of collected emissions for testing purposes.

*Emission speciation* means the analysis of vehicle or engine emissions to determine the individual chemical compounds which comprise those emissions.

*Engine Dynamometer Schedule (EDS)* means the transient engine speed versus torque time sequence commonly used in heavy-duty engine evaluation. The EDS for heavy-duty diesel engines is specified in 40 CFR part 86, appendix I(f)(2).

*Evaporative Emission Generator (EEG)* means a fuel tank or vessel to which

heat is applied to cause a portion of the fuel to evaporate at a desired rate.

*Evaporative emissions* means chemical compounds emitted into the atmosphere by vaporization of contents of a fuel or additive/fuel mixture.

*Evaporative fuel* means a fuel which has a Reid Vapor Pressure (RVP, pursuant to 40 CFR part 80, appendix "E") of 2.0 pounds per square inch or greater and is not supplied to motor vehicle engines by way of sealed containment and delivery systems.

*Evaporative fuel additive* means a fuel additive which, when mixed with its specified base fuel, causes an increase in the RVP of the base fuel by 0.4 psi or more relative to the RVP of the base fuel alone and results in an additive/base fuel mixture whose RVP is 2.0 psi, or greater. Excluded from this definition are fuel additives used with fuels which are supplied to motor vehicle engines by way of sealed containment and delivery systems.

*Federal Test Procedure (FTP)* means the body of exhaust and evaporative emissions test procedures described in 40 CFR 86 for the certification of new motor vehicles to Federal motor vehicle emissions standards.

*Fuel family* means a set of fuels and fuel additives which share basic chemical and physical formulation characteristics and can be used in the same engine or vehicle.

*Manufacturer* means a person who is a fuel manufacturer or additive manufacturer as defined in §79.2 (d) and (f).

*Nitrated polycyclic aromatic hydrocarbons (NPAH)* means the class of compounds whose molecular structure includes two or more aromatic rings and contains one or more nitrogen substitutions.

*Non-catalyzed emissions* means exhaust emissions not subject to an effective aftertreatment device such as a functional catalyst or particulate trap.

*Oxygenate compound* means an oxygen-containing, ashless organic compound, such as an alcohol or ether, which may be used as a fuel or fuel additive.

*Polycyclic aromatic hydrocarbons (PAH)* means the class of hydrocarbon compounds whose molecular structure includes two or more aromatic rings.

*Relabeled additive* means a fuel additive which is registered by its original manufacturer with EPA and is also registered and sold, unchanged in composition, under a different label and/or by a different entity.

*Semi-volatile organic compounds* means that fraction of gaseous combustion emissions which consists of compounds with greater than twelve carbon atoms and can be trapped in sorbent polymer resins.

*Urban Dynamometer Driving Schedule (UDDS)* means the 1372 second transient speed driving sequence used by EPA to simulate typical urban driving. The UDDS for light-duty vehicles is described in 40 CFR part 86, appendix I(a).

*Vapor phase* means the gaseous fraction of combustion emissions.

*Vehicle classes/subclasses* means the divisions of vehicle groups within a vehicle type, including light-duty vehicles, light-duty trucks, and heavy-duty vehicles as specified in 40 CFR part 86.

*Vehicle type* means the divisions of motor vehicles according to combustion cycle and intended fuel class, including, but not necessarily limited to, Otto cycle gasoline-fueled vehicles, Otto cycle methanol-fueled vehicles, diesel cycle diesel-fueled vehicles, and diesel cycle methanol-fueled vehicles.

*Whole emissions* means all components of unfiltered combustion emissions or evaporative emissions.

#### §79.51 General requirements and provisions.

(a) *Overview of requirements.* (1) All manufacturers of fuels and fuel additives that are designated for registration under this part are required to comply with the requirements of subpart F of this part either on an individual basis or as a participant in a group of manufacturers of the same or similar fuels and fuel additives, as defined in §79.56. If manufacturers elect to comply by participation in a group, each manufacturer continues to be individually subject to the requirements of subpart F of this part, and responsible for testing under this subpart. Each manufacturer, subject to the provisions for group applications in §79.51(b) and the special provisions in §79.58, shall submit all Tier 1 and Tier 2 information required by §§79.52, 79.53