§ 80.163  Detergent certification options.

To be used to satisfy the detergency requirements under §80.161(a), a detergent additive must be certified in accordance with the requirements of one or more of the options and suboptions described in this section. Where a certification option makes an additive eligible for use in a particular gasoline, that additive is also eligible for use in PRC which will be added to the particular gasoline. Under each option, the lowest additive concentration (LAC) or minimum recommended concentration registered for a detergent additive package, pursuant to §80.161(b)(1)(ii), must equal or exceed the lowest detergent treat rate shown to be needed in the designated test fuel in order to meet the deposit control performance requirements specified in §80.165.

by this test method. The FTIR infrared spectra submitted in connection with the registration of a detergent additive package must reflect the results of a test conducted on a sample of the additive containing the detergent-active component(s) at a concentration no lower than the concentration(s) (or the lower bound of a range of concentration) reported in the registration pursuant to paragraph (a)(3)(i)(B) of this section.

(e) To provide a basis for establishing an affirmative defense to presumptive liability pursuant to §80.169(c)(4)(i)(D)(ii), specific physical parameters must be identified which the manufacturer considers adequate and appropriate, in combination with other information and sampling requirements under this subpart, for identifying the detergent additive package and monitoring its production quality control.

(1) Such parameters shall include (but need not be limited to) viscosity, density, and basic nitrogen content, unless the additive manufacturer specifically requests, and EPA approves, the substitution of other parameter(s) which the manufacturer considers to be more appropriate for a particular additive package. The request must be made in writing and must include an explanation of how the requested physical parameter(s) are helpful as indicator(s) of detergent production quality control. EPA will respond to such requests in writing; the additional parameters are not approved until the certifier receives EPA’s written approval.

(2) The manufacturer shall identify a standardized measurement method, consistent with the chemical and physical nature of the detergent product, which will be used to measure each parameter. The documented ASTM repeatability for the method shall also be cited. The manufacturer’s target value for each parameter in the detergent package, and the expected range of production values for each parameter, shall be specified.

(3) EPA will consider the parameter measurements to be an acceptable basis for establishing an affirmative defense to presumptive liability, if the expected range of variability differs from the target value by an amount no greater than five times the standard repeatability of the test procedure, or by no more than 10 percent of the target value, whichever is less. However, in the case of nitrogen analysis or other procedures for measuring concentrations of specific chemical compounds or elements, when the target value is less than 10 parts per million, a range of variability up to 50 percent of the target value will be considered acceptable.

(4) If a manufacturer wishes to rely on measurement methods or production variability ranges which do not conform to the above limitations, then the manufacturer must receive prior written approval from EPA in order to be assured that any related parameter measurements will be considered an acceptable basis for establishing an affirmative defense. A request for such allowance must be made in writing. It must fully justify the adequacy of the test procedure, explain why a broader range of variability is required, and provide evidence that the production detergent will perform adequately throughout the requested range of variability.

§ 80.163  Detergent certification options.

To be used to satisfy the detergency requirements under §80.161(a), a detergent additive must be certified in accordance with the requirements of one or more of the options and suboptions described in this section. Where a certification option makes an additive eligible for use in a particular gasoline, that additive is also eligible for use in PRC which will be added to the particular gasoline. Under each option, the lowest additive concentration (LAC) or minimum recommended concentration registered for a detergent additive package, pursuant to §80.161(b)(1)(ii), must equal or exceed the lowest detergent treat rate shown to be needed in the designated test fuel in order to meet the deposit control performance requirements specified in §80.165.
(a) National certification. A detergent certified under a national certification option is eligible for use in gasoline which can be sold or dispensed anywhere within the United States or its territories (subject to approved State programs).

1) National generic certification option. To be certified under this option, a candidate detergent must meet the deposit control performance test requirements and standards specified in §80.165 using test fuels that conform to the requirements in §80.164(b)(1), Table 1. A detergent certified under this option is eligible to be used at a conforming LAC in any grade of gasoline, with or without an oxygenate component.

(i) National nonoxygenate suboption. The requirements for certification under this suboption are the same as those in paragraph (a)(1) of this section, except that, pursuant to §80.164(a)(2)(ii), the certification test fuel shall contain no ethanol or other oxygenate. A detergent certified under this suboption is eligible to be used at a conforming LAC only in gasoline that does not contain an oxygenate component.

(ii) National oxygenate-specific suboption. The requirements for certification under this suboption are the same as those in paragraph (a)(1) of this section, except that, pursuant to §80.164(a)(2)(iii), the certification test fuel shall contain an oxygenate compound other than ethanol. A detergent certified under this suboption is eligible to be used at a conforming LAC only in gasoline that contains no oxygenate component other than the one present in the test fuel.

(b) Petroleum Administrative Defense District (PADD) Certification. A detergent certified under a PADD certification option is eligible for use in gasoline which can be sold or dispensed to the ultimate purchaser, or to those parties who sell or dispense to the ultimate consumer, only within the PADD for which the certification was granted. The States and jurisdictions included within each PADD are specified in §79.59(b)(3)(i) through (v), except that, for purposes of PADD certification, the State of California is excluded from PADD V.

1) PADD generic certification option. To be certified under this option, a candidate detergent must meet the deposit control performance test requirements and standards specified in §80.165 using test fuels that conform to the requirements in §80.164(b)(1), Table 2, for a selected PADD. A detergent certified under this option is eligible to be used at a conforming LAC only in gasoline that contains no oxygenate component other than the one present in the test fuel.

2) National premium certification option. To be certified under this option, a candidate detergent must meet the deposit control performance test requirements and standards specified in §80.165 using test fuels that conform to the requirements in §80.164(b)(1), Table 1. A detergent certified under this option is eligible to be used at a conforming LAC only in premium grade gasoline, with or without an oxygenate component.

1) National premium nonoxygenate suboption. The requirements for certification under this suboption are the same as those in paragraph (a)(2) of this section, except that, pursuant to §80.164(a)(2)(ii), the certification test fuel shall contain no ethanol or other oxygenate. A detergent certified under this suboption is eligible to be used at a conforming LAC only in premium grade gasoline that does not contain an oxygenate component.

(ii) National premium oxygenate-specific suboption. The requirements for certification under this suboption are the same as those in paragraph (a)(2) of this section, except that, pursuant to §80.164(a)(2)(iii), the certification test fuel shall contain an oxygenate compound other than ethanol. A detergent certified under this suboption is eligible to be used at a conforming LAC only in gasoline that is premium grade and contains no oxygenate component other than the one present in the test fuel.
ethanol or other oxygenate. A detergent certified under this suboption is eligible to be used at a conforming LAC only in gasoline that is nonoxygenated and is ultimately dispensed in the selected PADD.

(ii) **PADD oxygenate-specific suboption.**

The requirements for certification under this suboption are the same as those in paragraph (b)(1) of this section, except that, pursuant to §80.164(a)(2)(iii), the certification test fuel shall contain an oxygenate compound other than ethanol. A detergent certified under this suboption is eligible to be used at a conforming LAC only in gasoline that contains no oxygenate component other than the one present in the test fuel and is ultimately dispensed in the selected PADD.

(2) **PADD premium certification option.** To be certified under this option, a candidate detergent must meet the deposit control performance test requirements and standards specified in §80.165 using test fuels that conform to the requirements in §80.164(b)(1), Table 2, for a selected PADD. A detergent certified under this option is eligible to be used at a conforming LAC only in gasoline that is premium grade (with or without an oxygenate component) and is ultimately dispensed in the selected PADD.

(i) **PADD premium nonoxygenate suboption.**

The requirements for certification under this suboption are the same as those in paragraph (b)(2) of this section, except that, pursuant to §80.164(a)(2)(ii), the certification test fuel shall contain no ethanol or other oxygenate. A detergent certified under this suboption is eligible to be used at a conforming LAC only in gasoline that is premium grade, contains no oxygenate component other than the one present in the test fuel, and is ultimately dispensed in the selected PADD.

(c) **Fuel-specific certification.** Except as provided in paragraph (c)(3) of this section, to be certified under the fuel-specific certification option, a candidate detergent must meet the deposit control performance test requirements and standards specified in §80.165 using test fuels that conform to the requirements of §80.164(c).

(i) A detergent certified under this option is eligible to be used at a conforming LAC only in the defined gasoline pool reported in the certification letter pursuant to §80.161(b)(3).

(ii) The gasoline pool must be kept segregated from any other gasoline prior to blending with the detergent additive.

(iii) Depending on the oxygenate components added to the test fuel pursuant to §80.164(a)(2), the gasoline pool may be inclusive of all grades and all oxygenate blending characteristics (i.e., generic), or may be restricted to non-oxygenated gasoline, or to gasoline containing a specific oxygenate compound. The certification may also be restricted to premium grade gasoline. Any such use restrictions must be specified in the certification letter. Provisions in §§80.168 and 80.171(a)(9) through (12) related to such use restrictions also apply.

(2) Detergent certification under this option entails special initial and annual reporting requirements, specified under §§80.161(b)(3)(vi) and 80.164(c)(3), which necessitate that the responsible party have control over and access to the segregated gasoline pool for which the detergent is certified. For this reason, the certifying party under this option is likely to be (but is not required to be) a fuel manufacturer or detergent blender, rather than the additive manufacturer.

(3) If a certifier demonstrates that the required test fuel representing a segregated pool of gasoline meets the
deposit control performance standards specified in §80.165 in the absence of a detergent additive, or using a detergent additive which has only PFID-control activity, then this gasoline pool (and PFID detergent, if applicable) can be certified accordingly under the fuel-specific option.

(4) Gasoline properly additized with a detergent certified under the fuel-specific option may be transferred or sold anywhere within the United States and its territories (subject to approved State programs).

d) CARB-Based Certification. A valid certification under section 2257 of Title 13, California Code of Regulations (CARB certification) may be the basis for a certification under the following restrictions and conditions:

(1) A detergent certified under this option may be used at the LAC specified in the CARB certification only in gasoline that meets the requirements of California Phase II reformulated gasoline (pursuant to Title 13, Chapter 5, Article 1, Subarticle 2, California Code of Regulations, Standards for Gasoline Sold Beginning March 1, 1996).

(2) The gasoline must be either: Additized in California; or sold or dispensed to the ultimate consumer in California (or to parties who sell or dispense to the ultimate consumer in California); or both additized and ultimately dispensed in California.

(3) A certification under this option will continue to be valid only as long as the CARB certification remains valid. The certifier must cease selling or using a detergent immediately upon being notified by CARB that the CARB certification for this detergent has been invalidated, and must notify EPA within 7 days of receipt of this notification.

[61 FR 35368, July 5, 1996]

§ 80.164 Certification test fuels.

(a) General requirements. This section provides specifications for the test fuels required in conjunction with the certification options described in §80.163. For each such certification option, the associated test fuel must meet or exceed the levels of four basic fuel parameters (aromatics, fuel sulfur, olefins, and T-90) prescribed here and may also contain specified oxygenate compounds. In addition, pursuant to paragraph (b)(3) of this section, some fuels must undergo an IVD demonstration test before they are eligible to be used as test fuels under this certification program. Test fuel characteristics must be reported to EPA in the detergent certification letter required pursuant to §80.161(b)(3).

(1) Quantitative specifications for the four basic fuel parameters, provided in paragraphs (b) and (c) of this section, refer to the levels of these parameters in the base gasoline prior to the addition of any oxygenate. The levels of the basic fuel parameters must be measured in accordance with applicable procedures in §80.46.

(2) Oxygenate components of certification test fuels must be of fuel grade quality. The type and amount of oxygenate to be blended into the test fuel (if any) shall be as follows:

(i) To certify a detergent for generic use (i.e., for use in gasoline containing any oxygenate compound, as well as for use in nonoxygenated gasoline), the finished test fuel shall contain ethanol at 10 volume percent.

(ii) To certify a detergent specifically for use in nonoxygenated gasoline, no oxygenate compounds shall be added to the test fuel.

(iii) To certify a detergent specifically for use in gasoline blended with a specified oxygenate compound other than ethanol, the specified oxygenate must be added to the test fuel in an amount such that the finished fuel contains the oxygenate at the highest concentration at which the specific oxygenate may be used in in-use gasoline.

(3) No detergent-active substance other than the detergent additive package undergoing testing may be added to a certification test fuel. Typical nondetergent additives, such as antioxidants, corrosion inhibitors, and metal deactivators, may be present in the test fuel at the discretion of the additive certifier. In addition, any nondetergent additives (other than oxygenate compounds) which are commonly blended into gasoline and which