



STATE OF CALIFORNIA

Bid Specification Biodiesel Blend (B5)

9130-0496

1.0 SCOPE: This specification covers a biodiesel fuel (B5) blend containing 5% biodiesel, with the remainder being ultra low sulfur petroleum diesel.

2.0 APPLICABLE DOCUMENTS: Specifications and standards referenced in this document in effect on the opening of the invitation for bid forms a part of this specification.

3.0 Requirements:

3.1 Material, Chemical and Physical Properties: The biodiesel fuel (B5) blend containing 5% biodiesel shall meet all of the following requirements:

- 3.1.1 The petroleum diesel fuel used for the blending process shall be ultra low sulfur No. 1-D diesel fuel, ultra low sulfur No. 2-D diesel fuel, or combination of grade No.1 and grade No. 2-D diesel fuel. It shall meet or exceed the requirements of the latest edition of ASTM D975 and shall meet sulfur content and the aromatic content in California Code of Regulations, Title 13, section 2281 and section 2282.
- 3.1.2 The Biodiesel Fuel Blend Stock (B100) used for blending process shall meet or exceed the requirements of the latest edition of ASTM D6751 and shall contain less than 10% aromatics; it shall be clear, bright, and visually free from undissolved water, sediment, and suspended matter according to ASTM D 4176 Procedure 1 Test Method.
- 3.1.3 The biodiesel blend shall consist of 5.0 +/- 1.0% by volume Biodiesel Fuel Blend Stock (B100), measured per EN 14078 or ASTM D7371. The remainder of the fuel shall be ultra low sulfur No. 1-D diesel fuel, ultra low sulfur No. 2-D diesel fuel, or combination of grade No.1 and grade No. 2-D diesel fuel.
- 3.1.4 Cloud point of blended B5 fuel shall be -5 °C or lower.
- 3.1.5 Finished biodiesel fuel blends shall meet the specifications set forth by ASTM International in the latest edition of "Standard Specifications for diesel Fuel Oils D 975".
- 3.1.6 The chemical and physical requirements of the furnished fuel (the biodiesel blend) shall meet the requirements of the California Code of Regulations, Title 13, section 2281 (sulfur content) and section 2282 (aromatic content).

4.0 Quality Assurance Provisions:

4.1 The delivered product may be inspected and tested prior to acceptance according to ASTM standards for Sulfur, and Aromatics and other test methods Specified in ASTM D975 and ASTM D6751, including but not limited to Cloud Point and Acid Number.

4.2 Certification:

4.2.1 Supplier shall provide at the time of delivery, a Certificate of Analysis (COA) for the biodiesel fuel blend stock (B100) used in the final blend showing that it meets the requirements of latest edition of ASTM D6751 including but not limited to Total Glycerin, Cloud Point, Acid Number. COA for B100 used in the final blend shall not be older than 30 days and it shall be obtained from fuel stored in California.

4.2.3 Supplier shall provide documentation at the time of delivery showing that the petroleum diesel fuel used in the blend meets the requirements of latest edition of ASTM D975 and the requirements specified in section 3.

4.2.4 Upon request, the supplier shall provide QA/QC documentation on the quality of the B100 in their storage tank, which should include Free Glycerin, Monoglycerides, Diglycerides, Triglycerides, Total Glycerin, Flash Point, KF Water, Acid Number, Oxidation Stability, Cold Soak Filtraion Assembly (CSFA) Total Particulate Count, and CFSA Filtration Time. The sample shall be identified with the manufacturing date, refinery source and its location, and the storage tank identification number.

4.2.5 Supplier shall provide the documentation showing that the blended biodiesel meets the requirement of 20.0 + 0./-2.0% by volume Biodiesel Fuel Blend Stock (B100).

4.2.6 For additional details see invitation for Bid (IFB).

4.3 Producer of biodiesel shall be accredited to BQ -9000 and the marketer shall be certified to BQ-9000 by National Biodiesel Board (NBB).

4.4 Contamination:

Supplier shall ensure that all trucks, railcars and vessels are drained and inspected prior to loading if the previous load contained a product that would contaminate the biodiesel (e.g., gasoline, ethanol, methanol, lube oils, raw vegetable oil or animal fats) including dyed products and products in excess of 15 ppm sulfur.

4.5 Biodiesel blend shall comply with all Federal, State, and local regulations at the time of delivery.



STATE OF CALIFORNIA

Bid Specification Biodiesel Blend (B20)

9130-0495

1.0 SCOPE: This specification covers a biodiesel fuel (B20) blend containing 20% biodiesel, with the remainder being ultra low sulfur petroleum diesel.

2.0 APPLICABLE DOCUMENTS: Specifications and standards referenced in this document in effect on the opening of the invitation for bid forms a part of this specification.

3.0 Requirements:

3.1 Material, Chemical and Physical Properties: The biodiesel fuel (B20) blend containing 20% biodiesel shall meet all of the following requirements:

3.1.1 The petroleum diesel fuel used for the blending process shall be ultra low sulfur No. 1-D diesel fuel, ultra low sulfur No. 2-D diesel fuel, or combination of grade No.1 and grade No. 2-D diesel fuel. It shall meet or exceed the requirements of the latest edition of ASTM D975 and shall meet sulfur content and the aromatic content in California Code of Regulations, Title 13, section 2281 and section 2282.

3.1.2 The biodiesel fuel blend stock (B100) used for blending process shall meet or exceed the requirements of the latest edition of ASTM D6751 and shall contain less than 10% aromatics; it shall be clear, bright, and visually free from undissolved water, sediment, and suspended matter according to ASTM D 4176 Procedure 1 Test Method.

3.1.3 The biodiesel blend shall consist of 20.0 +/-2.0 % by volume Biodiesel Fuel Blend Stock (B100), measured per EN 14078 or ASTM D7371. The remainder of the fuel shall be ultra low sulfur No. 1-D diesel fuel, ultra low sulfur No. 2-D diesel fuel, or combination of grade No.1 and grade No. 2-D diesel fuel.

3.1.4 Cloud point of blended B20 fuel shall be 0 °C or lower.

3.1.5 Finished biodiesel fuel blends shall meet the specifications set forth by ASTM International in the latest edition of "Standard Specifications for Diesel Fuel Oil, Biodiesel Blend (B6 to B20) D 7467".

3.1.6 The chemical and physical requirements of the furnished fuel shall meet the requirements of the California Code of Regulations, Title 13, section 2281 (sulfur content) and section 2282 (aromatic content).

4.0 Quality Assurance Provisions:

4.1 The delivered product may be inspected and tested prior to acceptance according to ASTM standards for Sulfur, and Aromatics and other test methods specified in ASTM

D975 and ASTM D6751, including but not limited to Cloud Point and Acid Number or other test method specified in section 3.

4.2 Certification:

- 4.2.1 Supplier shall provide at the time of delivery, a Certificate of Analysis (COA) for the biodiesel fuel blend stock (B100) used in the final blend showing that it meets the requirements of latest edition of ASTM D6751 including but not limited to Total Glycerin, Cloud Point, Acid Number. COA for B100 used in final blend shall not be older than 30 days and it shall be obtained from fuel stored in California.
 - 4.2.2 Supplier shall provide documentation at the time of delivery showing that the petroleum diesel fuel used in the blend meets the requirements of latest edition of ASTM D975 and the requirements specified in section 3.
 - 4.2.3 Upon request, the supplier shall provide QA/QC documentation on the quality of the B100 in their storage tank, which should include Free Glycerin, Monoglycerides, Diglycerides, Triglycerides, Total Glycerin, Flash Point, KF Water, Acid Number, Oxidation Stability, Cold Soak Filtraion Assembly (CSFA) Total Particulate Count, and CFSA Filtration Time. The sample shall be identified with the manufacturing date, refinery source and location, and the storage tank identification number.
 - 4.2.4 Supplier shall provide the documentation showing that the blended biodiesel meets the requirement of 20.0 + 0./-2.0% by volume Biodiesel Fuel Blend Stock (B100).
 - 4.2.5 For additional details see Invitation for Bid (IFB).
- 4.3 Producer of biodiesel shall be accredited to BQ -9000 and the marketer shall be certified to BQ-9000 by National Biodiesel Board (NBB).
- 4.4 **Contamination:**
Supplier shall ensure that all trucks, railcars and vessels are drained and inspected prior to loading if the previous load contained a product that would contaminate the biodiesel (e.g., gasoline, ethanol, methanol, lube oils, raw vegetable oil or animal fats). including dyed products and products in excess of 15 ppm sulfur.
- 4.5 Biodiesel blend shall comply with all Federal, State, and local regulations at the time of delivery.