



**TERMINAL SPECIFICATION FOR BIODIESEL FUEL BLEND STOCK
(IN ACCORDANCE WITH ASTM D6751)**

PRODUCT PROPERTY	TEST METHOD (1)	MIN	MAX	UNITS
Appearance	D4176 Proc.2		2	
Flash Point (Closed Cup)	D 93	93		°C
Alcohol Control				
One of the following must be met:				
1. Methanol Content	EN 14110		0.2	mass %
2. Flash Point	D93	130		°C
Water and Sediment	D2709		0.050	volume %
Kinematic Viscosity, 40°C	D445	1.9	6.0	mm ² /s
Sulfated Ash	D874		0.020	mass %
Sulfur	D5453			
Grade S 15			0.0015 (15)	mass % (ppm)
Copper Strip Corrosion	D130		No. 3	
Cetane Number	D613	47		
Cloud Point, Winter ^{(2) (3)}	D2500		2	°C
Cloud Point, Summer ^{(2) (3)}	D2500		10	°C
Carbon Residue ⁽⁴⁾	D4530		0.050	mass %
Acid Number	D664		0.50	mg KOH/g
Cold Soak Filterability, Winter ⁽²⁾	D7501		200	seconds
Cold Soak Filterability, Summer ⁽²⁾	D7501		360	seconds
Free Glycerin	D6584		0.020	mass %
Total Glycerin	D6584		0.240	mass %
Monoglyceride Content, Winter ⁽²⁾	D6584		0.50	mass %
Monoglyceride Content, Summer ⁽²⁾	D6584		0.80	mass %
Phosphorus Content	D4951		0.001	mass %
Distillation Temperature, Atmospheric Equivalent Temperature	D1160			
90% Recovered			360	°C
Sodium and Potassium, combined	EN 14538		5	ppm (µg/g)
Calcium and Magnesium, combined	EN 14538		5	ppm (µg/g)
Oxidation Stability ⁽⁵⁾	EN 15751 ⁽⁶⁾	3		hours

Notes:

- (1) All test methods are approved referee methods. See ASTM D6751 for other acceptable methods.
- (2) Summer is (April 1 through September 30). Winter is (October 1 through March 31).
- (3) No cold flow additives permitted.
- (4) Carbon residue shall be run on the 100 % sample (see ASTM D6751).
- (5) Oxidation Stability: 6 hour minimum with an Antioxidant (AO) stability additive.
- (6) EN 14112 may be used as an alternative method.

Other Requirements:

Producers must be BQ9000 certified.

A Certificate of Analysis must be received with each load delivered.

Biodiesel suppliers that are not BQ9000 certified shall demonstrate that they have a quality assurance program in place satisfactory to Sunoco Logistics.



TERMINAL BIODIESEL ACCEPTANCE CRITERIA (IN ACCORDANCE WITH SXL SPECIFICATIONS)

Sunoco Logistics Terminals are certified as BQ9000 Marketers, as such biodiesel quality and receipts must meet or exceed the requirements of BQ9000: <http://www.bq-9000.org/>. Biodiesel shall not be off-loaded until the product has been inspected or otherwise verified as conforming to the Sunoco Logistics specification requirements. In determining the amount and nature of receiving inspection, consideration shall be given to the amount of control exercised by the supplier and recorded as evidence of conformance.

Acceptance Policy:

When B100 or B99.9 is delivered to the Terminal, the requirements are as follows:

1. Verification of the receiving tank temperature and the product level as per the daily folio, the truck load size, compartments size, available tank room, and delivery location.
2. All receipts at the time of delivery shall be accompanied by a Certificate of Analysis (C of A) from the supplier; a faxed C of A is acceptable at time of delivery. Biodiesel shall not be off-loaded until a C of A is obtained.
3. Comparison of the C of A results to the most recent version of Sunoco Logistics Specification. Terminal Operations shall verify the delivery C of A's meet the specification. If the biodiesel does not meet the specification, the product shall not be off-loaded.
4. A printed Bill of Lading (BOL) shall be provided with each receipt. The biodiesel shall not be off-loaded until the BOL is obtained. The BOL shall list the EPA registration number, and the Lot number(s) of the BOL and C of A must match.
5. A truck delivery wash ticket or a Bill of Lading (BOL) indicating the prior load on the trailer must be provided. The biodiesel shall not be off-loaded without a wash ticket or a BOL indicating the prior load. Acceptable prior loads are: biodiesel, ULSD, 15HO and biodiesel blends of ULSD or 15HO. If a prior load was not biodiesel, the carrier should state on the freight bill that the trailer contained only minimal residue prior to loading the current load of biodiesel.
6. A sample will be taken from the delivering truck prior to off-load. The acceptable method for obtaining a sample will be using a sampling device at the manifold connection.
7. The sample will be checked to ensure it meets the acceptance criteria as referenced in Section 7 of the BQ9000 Marketer Manual. The requirement states that the sample must be tested as per ASTM D4176 Procedure 2, maximum value of 2. The sample will be visually evaluated at 77 °F, must be clear and bright, free of water and/or particulates. The sample must also show no evidence of red dye.
8. All paper work related to the receipt of biodiesel including the producer C of A, shipping paperwork, copies of truck delivery wash ticket or BOL indicating what product was previously on trailer, BOL from terminal automation showing receipt into shipper inventory and any other relevant paper work or copies of receipts of test results will be filed together at the terminal.
9. The receiving biodiesel tank(s) shall never be opened to the terminal truck loading rack while off-loading the biodiesel.
10. No biodiesel tank shall ever be opened to the terminal truck loading without being first checked for water.
11. Biodiesel tanks are sampled and tested onsite at the terminal using the test methods as required per BQ9000. Third party labs may be required to perform the testing using these required test methods.