

**Sec. 16a-22c-1. Petroleum product definitions**

(a) The purpose of these regulations is to implement Section 2 of Public Act 86-198, establishing petroleum product definitions which are to be used in determining the registration requirements for the Petroleum Product Vendor Registration program administered by the Office of Policy and Management pursuant to Section 16a-22d of the General Statutes.

(b) The petroleum product definitions contained herein are devised to be in conformance with the applicable Standards and Specifications of the American Society For Testing And Materials (ASTM), as amended. As used in these regulations the terms middle distillate, residual fuel oil, liquified petroleum gas, motor gasoline, aviation gasoline and aviation turbine fuel are defined as follows:

(1) Middle Distillate means a general classification for one or more distilled petroleum fractions used for domestic heating and industrial burners, or for power generation in compression ignition engines. These fractions are categorized as follows:

(A) Kerosine—A refined petroleum distillate conforming to the requirements of ASTM Specification D 3699. Two classifications of kerosine are recognized by ASTM Specification D 3699:

(i) No. 1-K—A special low-sulfur grade kerosine suitable for use in non-flue connected kerosine burner appliances and for wick-fed illuminating lamps.

(ii) No. 2-K—A regular grade kerosine suitable for use in flue connected burner appliances and for wick-fed illuminating lamps.

(B) No. 1 Fuel Oil—A light distillate fuel oil intended for use in vaporizing pot-type burners. Properties of No. 1 Fuel Oil are defined in ASTM Specification D 396.

(C) No. 2 Fuel Oil—A distillate fuel oil for use in atomizing-type burners for domestic heating, or for moderate capacity commercial-industrial burner units. No. 2 Fuel Oil properties are defined in ASTM Specification D 396.

(D) Diesel Fuel—Distillate fuel oil used in compression-ignition engines. Three classifications of diesel fuel are recognized by ASTM Specification D 975:

(i) No. 1-D—A volatile kerosine-type distillate for high-speed diesel engines in service comprising wide variations in speed and load. No. 1-D includes Type C-B diesel fuel used for city buses and similar operations.

(ii) No. 2-D—A gas oil type distillate for use in high-speed diesel engines generally operated under uniform speed and load conditions. No. 2-D includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engined trucks.

(iii) No. 4-D—A low-volatility distillate, or blend of such distillate and residual fuel oil, for low- and medium-speed diesel engines in sustained constant-speed service.

(E) No. 4 Fuel Oil—A fuel oil for commercial burner installations not equipped with preheating facilities. Extensively used in industrial plants. This grade is usually a blend of distillate and residual fuel stocks, but can be a heavy distillate with properties as defined in ASTM Specification D 396.

(2) Residual Fuel Oil—General classification for fuels obtained as liquid still bottoms from the distillation of crude, used alone or in blends with heavy liquids from other refinery process operations. Includes Grades No. 5 and No. 6, as described below. Properties are described in ASTM Specification D 396 and ASTM 975.

(A) Grade No. 5—Residual fuel oil more viscous than Grade No. 4 distillate fuel for burners capable of handling product more viscous than Grade No. 4 distillate fuel. Preheat may be necessary depending upon equipment design and climatic conditions.

(B) Grade No. 6—A high-viscosity fuel oil for commercial and industrial heating and power generation. Preheating is required for satisfactory use. Includes heavy-grade residual fuel oil referred to as Bunker C fuel oil, and Navy Special, a grade of residual fuel oil meeting U.S. Government Specification MIL-F-859D, for use in steam powered vessels in government service and in shore power plants.

(3) Liquified Petroleum Gas—Means propane and butane and propane/butane mixes.

(A) Propane—A normally gaseous paraffinic compound ( $C_3H_8$ ), including all products covered by the Natural Gas Producers Association (NGPA) specifications for commercial and HD-5 propane.

(B) Butane—A normally gaseous paraffinic compound ( $C_4H_{10}$ ), including all products covered by the Natural Gas Producers Association (NGPA) specifications for commercial butane.

(4) Motor Gasoline means a complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, including alcohol additives, obtained by blending appropriate refinery streams to form a fuel suitable for use in spark ignition engines. Motor Gasoline includes all refinery products within the gasoline range (ASTM Specification D 439) that are to be marketed as motor gasoline without further processing, i.e. any refinery operation except mechanical blending. Motor Gasoline includes both leaded and unleaded grades.

(A) Finished Leaded Motor Gasoline—Motor gasoline (as described above) which is produced with the use of any lead additive or which contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorous per gallon.

(B) Finished Unleaded Motor Gasoline—Motor gasoline (as described above) containing not more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorous per gallon.

(C) Gasohol—A mixture of 90 volume percent motor gasoline and 10 volume percent of ethanol, methanol or cosolvents as these terms are defined in the Regulations of Connecticut State Agencies, 16a-15-7 (d).

(5) Aviation Gasoline—All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D 910 and Military Specification MIL-G-5572. Aviation Gasoline includes all refinery products within the gasoline range that are to be marketed straight or in blends as aviation gasoline without further processing, i.e., any refinery operation except mechanical blending. Aviation Gasoline also includes finished components in the gasoline range which will be used for blending or compounding into aviation gasoline.

(6) Aviation Turbine Fuel—All refined petroleum fuel designed to operate aircraft turbine engines:

(A) Naptha-type or Jet B—A fuel in the heavy naptha boiling range covered by ASTM Specification D 1655 and meeting Military Specification MIL-T-5624 (JP-4). A Naptha-type fuel used for turbojet and turboprop aircraft engines, primarily by the military. This definition excludes ram-jet and petroleum rocket fuels.

(B) Kerosine-type or Jet A—A quality kerosine product covered by ASTM Specification D 1655. A Kerosine-type fuel used primarily as fuel for commercial turbojet and turboprop aircraft engines. A relatively low freezing point distillate of the kerosine type.

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