## ASTM Volume 05.05, February 2018

## Petroleum Products, Liquid Fuels, and Lubricants (V): D7756–Latest; Combustion Characteristics; Manufactured Carbon and Graphite Products

C559-16 Standard Test Method for Bulk Density by Physical Measurements of Manufactured Carbon and Graphite Articles

C560-15e1 Standard Test Methods for Chemical Analysis of Graphite

C561-16 Standard Test Method for Ash in a Graphite Sample

C562-15 Standard Test Method for Moisture in a Graphite Sample

C565-15 Standard Test Methods for Tension Testing of Carbon and Graphite Mechanical Materials

C611-98(2016) Standard Test Method for Electrical Resistivity of Manufactured Carbon and Graphite Articles at Room Temperature

C625-15 Standard Practice for Reporting Irradiation Results on Graphite

C651-15 Standard Test Method for Flexural Strength of Manufactured Carbon and Graphite Articles Using Four-Point Loading at Room Temperature

C662-16 Standard Specification for Impervious Graphite Pipe and Threading

C695-15 Standard Test Method for Compressive Strength of Carbon and Graphite

C714-17 Standard Test Method for Thermal Diffusivity of Carbon and Graphite by Thermal Pulse Method

C747-16 Standard Test Method for Moduli of Elasticity and Fundamental Frequencies of Carbon and Graphite Materials by Sonic Resonance

C748-98(2015) Standard Test Method for Rockwell Hardness of Graphite Materials

C749-15 Standard Test Method for Tensile Stress-Strain of Carbon and Graphite

C769-15 Standard Test Method for Sonic Velocity in Manufactured Carbon and Graphite Materials for Use in Obtaining an Approximate Value of Young's Modulus

C781-08(2014) Standard Practice for Testing Graphite and Boronated Graphite Materials for High-Temperature Gas-Cooled Nuclear Reactor Components

C783-85(2015) Standard Practice for Core Sampling of Graphite Electrodes

C808-75(2016) Standard Guide for Reporting Friction and Wear Test Results of Manufactured Carbon and Graphite Bearing and Seal Materials

C816-15 Standard Test Method for Sulfur Content in Graphite by Combustion-Iodometric Titration Method

C838-16 Standard Test Method for Bulk Density of As-Manufactured Carbon and Graphite Shapes

C886-98(2015) Standard Test Method for Scleroscope Hardness Testing of Carbon and Graphite Materials

C1025-15 Standard Test Method for Modulus of Rupture in Bending of Electrode Graphite

C1039-85(2015) Standard Test Methods for Apparent Porosity, Apparent Specific Gravity, and Bulk Density of Graphite Electrodes

C1179-15 Standard Test Method for Oxidation Mass Loss of Manufactured Carbon and Graphite Materials in Air

D613-17ce1 Standard Test Method for Cetane Number of Diesel Fuel Oil

D909-17 Standard Test Method for Supercharge Rating of Spark-Ignition Aviation Gasoline

D2699-17 Standard Test Method for Research Octane Number of Spark-Ignition Engine Fuel

D2700-17 Standard Test Method for Motor Octane Number of Spark-Ignition Engine Fuel

D2885-13 Standard Test Method for Determination of Octane Number of Spark-Ignition Engine Fuels by On-Line Direct Comparison Technique

D6890-16e1 Standard Test Method for Determination of Ignition Delay and Derived Cetane Number (DCN) of Diesel Fuel Oils by Combustion in a Constant Volume Chamber

D7170-16 Standard Test Method for Determination of Derived Cetane Number (DCN) of Diesel Fuel Oils—Fixed Range Injection Period, Constant Volume Combustion Chamber Method

D7219-08(2014) Standard Specification for Isotropic and Near-isotropic Nuclear Graphites

D7301-11(2015) Standard Specification for Nuclear Graphite Suitable for Components Subjected to Low Neutron Irradiation Dose

D7542-15 Standard Test Method for Air Oxidation of Carbon and Graphite in the Kinetic Regime

D7756-13 Standard Test Method for Residues in Liquefied Petroleum (LP) Gases by Gas Chromatography with Liquid, On-Column Injection

D7757-17 Standard Test Method for Silicon in Gasoline and Related Products by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry

D7775-16 Standard Guide for Measurements on Small Graphite Specimens

D7777-13 Standard Test Method for Density, Relative Density, or API Gravity of Liquid Petroleum by Portable Digital Density

Meter

D7778-15 Standard Guide for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

D7779-11(2015) Standard Test Method for Determination of Fracture Toughness of Graphite at Ambient Temperature

D7794-14 Standard Practice for Blending Mid-Level Ethanol Fuel Blends for Flexible-Fuel Vehicles with Automotive Spark-Ignition Engines

D7795-15 Standard Test Method for Acidity in Ethanol and Ethanol Blends by Titration

D7796-17 Standard Test Method for Analysis of Ethyl tert-Butyl Ether (ETBE) by Gas Chromatography

D7797-17 Standard Test Method for Determination of the Fatty Acid Methyl Esters Content of Aviation Turbine Fuel Using Flow Analysis by Fourier Transform Infrared Spectroscopy—Rapid Screening Method

D7798-15 Standard Test Method for Boiling Range Distribution of Petroleum Distillates with Final Boiling Points up to 538 °C by Ultra Fast Gas Chromatography (UF GC)

D7806-12 Standard Test Method for Determination of the Fatty Acid Methyl Ester (FAME) Content of a Blend of Biodiesel and Petroleum-Based Diesel Fuel Oil Using Mid-Infrared Spectroscopy

D7807-12 Standard Test Method for Determination of Boiling Range Distribution of Hydrocarbon and Sulfur Components of Petroleum Distillates by Gas Chromatography and Chemiluminescence Detection

D7808-12 Standard Practice for Determining the Site Precision of a Process Stream Analyzer on Process Stream Material

D7825-12 Standard Guide for Generating a Process Stream Property Value through the Application of a Process Stream Analyzer

D7826-17a Standard Guide for Evaluation of New Aviation Gasolines and New Aviation Gasoline Additives

D7827-12(2017) Standard Test Method for Measuring n-Heptane Induced Phase Separation of Asphaltene from Heavy Fuel Oils as Separability Number by an Optical Device

D7828-12 Standard Test Method for Determination of Residue Composition in Liquefied Petroleum Gas (LPG) Using Automated Thermal Desorption/Gas Chromatography (ATD/GC)

D7829-13e1 Standard Guide for Sediment and Water Determination in Crude Oil

D7843-16 Standard Test Method for Measurement of Lubricant Generated Insoluble Color Bodies in In-Service Turbine Oils using Membrane Patch Colorimetry

D7844-12 Standard Test Method for Condition Monitoring of Soot in In-Service Lubricants by Trend Analysis using Fourier Transform Infrared (FT-IR) Spectrometry

D7845-17 Standard Test Method for Determination of Chemical Species in Marine Fuel Oil by Multidimensional Gas Chromatography/Mass Spectrometry

D7846-16 Standard Practice for Reporting Uniaxial Strength Data and Estimating Weibull Distribution Parameters for Advanced Graphites

D7847-17 Standard Guide for Interlaboratory Studies for Microbiological Test Methods

D7861-14e1 Standard Test Method for Determination of Fatty Acid Methyl Esters (FAME) in Diesel Fuel by Linear Variable Filter (LVF) Array Based Mid-Infrared Spectroscopy

D7862-17 Standard Specification for Butanol for Blending with Gasoline for Use as Automotive Spark-Ignition Engine Fuel

D7863-17 Standard Guide for Evaluation of Convective Heat Transfer Coefficient of Liquids

D7872-13 Standard Test Method for Determining the Concentration of Pipeline Drag Reducer Additive in Aviation Turbine Fuels

D7873-13(2017) Standard Test Method for Determination of Oxidation Stability and Insolubles Formation of Inhibited Turbine
Oils at 120 °C Without the Inclusion of Water (Dry TOST Method)

D7874-13 Standard Guide for Applying Failure Mode and Effect Analysis (FMEA) to In-Service Lubricant Testing

D7875-14 Standard Test Method for Determination of Butanol and Acetone Content of Butanol for Blending with Gasoline by Gas Chromatography

D7876-13 Standard Practice for Practice for Sample Decomposition Using Microwave Heating (With or Without Prior Ashing) for Atomic Spectroscopic Elemental Determination in Petroleum Products and Lubricants

D7889-13 Standard Test Method for Field Determination of In-Service Fluid Properties Using IR Spectroscopy

D7898-14 Standard Practice for Lubrication and Hydraulic Filter Debris Analysis (FDA) for Condition Monitoring of Machinery

D7899-13 Standard Test Method for Measuring the Merit of Dispersancy of In-Service Engine Oils with Blotter Spot Method

D7900-17 Standard Test Method for Determination of Light Hydrocarbons in Stabilized Crude Oils by Gas Chromatography

D7901-14b Standard Specification for Dimethyl Ether for Fuel Purposes

D7915-14 Standard Practice for Application of Generalized Extreme Studentized Deviate (GESD) Technique to Simultaneously Identify Multiple Outliers in a Data Set

D7917-14 Standard Practice for Inductive Wear Debris Sensors in Gearbox and Drivetrain Applications

D7918-17a Standard Test Method for Measurement of Flow Properties and Evaluation of Wear, Contaminants, and Oxidative Properties of Lubricating Grease by Die Extrusion Method and Preparation

D7919-14(2017) Standard Guide for Filter Debris Analysis (FDA) Using Manual or Automated Processes

D7920-15e1 Standard Test Method for Determination of Fuel Methanol (M99) and Methanol Fuel Blends (M10 to M99) by Gas Chromatography

D7922-14 Standard Test Method for Determination of Glycol for In-Service Engine Oils by Gas Chromatography

D7923-17a Standard Test Method for Water in Ethanol and Hydrocarbon Blends by Karl Fischer Titration

D7945-16 Standard Test Method for Determination of Dynamic Viscosity and Derived Kinematic Viscosity of Liquids by Constant Pressure Viscometer

D7946-14 Standard Test Method for Initial pH (i-pH)-Value of Petroleum Products

D7959-16 Standard Test Method for Chloride Content Determination of Aviation Turbine Fuels using Chloride Test Strip

D7960-17 Standard Specification for Unleaded Aviation Gasoline Test Fuel Containing Non-hydrocarbon Components

D7961-17 Standard Practice for Calibrating U-tube Density Cells over Large Ranges of Temperature and Pressure

D7962-17 Standard Practice for Determination of Minimum Immersion Depth and Assessment of Temperature Sensor Measurement Drift

D7963-14 Standard Test Method for Determination of Contamination Level of Fatty Acid Methyl Esters in Middle Distillate and Residual Fuels Using Flow Analysis by Fourier Transform Infrared Spectroscopy—Rapid Screening Method

D7972-14 Standard Test Method for Flexural Strength of Manufactured Carbon and Graphite Articles Using Three-Point Loading at Room Temperature

D7973-14 Standard Guide for Monitoring Failure Mode Progression in Plain Bearings

D7974-15 Standard Test Method for Determination of Farnesane, Saturated Hydrocarbons, and Hexahydrofarnesol Content of Synthesized Iso-Paraffins (SIP) Fuel for Blending with Jet Fuel by Gas Chromatography

D7975-14 Standard Test Method for Determination of Vapor Pressure of Crude Oil: VPCRx-F(Tm°C)(Manual Expansion Field Method)

D7978-14 Standard Test Method for Determination of the Viable Aerobic Microbial Content of Fuels and Associated Water— Thixotropic Gel Culture Method

D7994-17 Standard Test Method for Total Fluorine, Chlorine, and Sulfur in Liquid Petroleum Gas (LPG) by Oxidative Pyrohydrolytic Combustion Followed by Ion Chromatography Detection (Combustion Ion Chromatography-CIC)

D7996-15 Standard Test Method for Measuring Visible Spectrum of Asphaltenes in Heavy Fuel Oils and Crude Oils by Spectroscopy in a Microfluidic Platform

D8003-15a Standard Test Method for Determination of Light Hydrocarbons and Cut Point Intervals in Live Crude Oils and Condensates by Gas Chromatography

D8004-15 Standard Test Method for Fuel Dilution of In-Service Lubricants Using Surface Acoustic Wave Sensing

D8009-15 Standard Practice for Manual Piston Cylinder Sampling for Volatile Crude Oils, Condensates, and Liquid Petroleum Products

D8011-17 Standard Specification for Natural Gasoline as a Blendstock in Ethanol Fuel Blends or as a Denaturant for Fuel Ethanol

D8022-15 Standard Test Method for Roll Stability of Lubricating Grease in Presence of Water (Wet Roll Stability Test)

D8029-17a Standard Specification for Biodegradable, Low Aquatic Toxicity Hydraulic Fluids

D8045-17 Standard Test Method for Acid Number of Crude Oils and Petroleum Products by Catalytic Thermometric Titration

D8046-16a Standard Guide for Pumpability of Heat Transfer Fluids

D8047-17a Standard Test Method for Evaluation of Engine Oil Aeration Resistance in a Caterpillar C13 Direct-Injected Turbocharged Automotive Diesel Engine

D8048-17 Standard Test Method for Evaluation of Diesel Engine Oils in T-13 Diesel Engine

D8049-17 Standard Test Method for Determining Concentration, Count, and Size Distribution of Solid Particles and Water in Light and Middle Distillate Fuels by Direct Imaging Particle Analyzer

D8056-16 Standard Guide for Elemental Analysis of Crude Oil

D8070-16 Standard Test Method for Screening of Fuels and Fuel Associated Aqueous Specimens for Microbial Contamination by Lateral Flow Immunoassay

D8071-17 Standard Test Method for Determination of Hydrocarbon Group Types and Select Hydrocarbon and Oxygenate Compounds in Automotive Spark-Ignition Engine Fuel Using Gas Chromatography with Vacuum Ultraviolet Absorption Spectroscopy Detection (GC-VUV)

D8072-17 Standard Classification for Reporting Solids and Insoluble Water Contamination of Hydrocarbon-Based Petroleum Products When Analyzed by Imaging Instrumentation

D8073-16 Standard Test Method for Determination of Water Separation Characteristics of Aviation Turbine Fuel by Small Scale Water Separation Instrument

D8074-16 Standard Test Method for Evaluation of Diesel Engine Oils in DD13 Diesel Engine

D8075-16 Standard Guide for Categorization of Microstructural and Microtextural Features Observed in Optical Micrographs of Graphite

D8076-17a Standard Specification for 100 Research Octane Number Test Fuel for Automotive Spark-Ignition Engines

D8091-16 Standard Guide for Impregnation of Graphite with Molten Salt

D8092-17 Standard Test Method for Field Determination of Kinematic Viscosity Using a Microchannel Viscometer

D8093-16 Standard Guide for Nondestructive Evaluation of Nuclear Grade Graphite

D8097-17 Standard Test Method for Determination of Bulk Density for Specific Size Fractions of Calcined Petroleum Coke
Using a Transaxial Pressure Pycnometer

D8098-17 Standard Test Method for Permanent Gases in C2 and C3 Hydrocarbon Products by Gas Chromatography and Pulse Discharge Helium Ionization Detector

D8110-17 Standard Test Method for Elemental Analysis of Distillate Products by Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

D8111-17 Standard Test Method for Evaluation of Automotive Engine Oils in the Sequence IIIH, Spark-Ignition Engine

D8112-17 Standard Guide for Obtaining In-Service Samples of Turbine Operation Related Lubricating Fluid

D8114-17 Standard Test Method for Measurement of Effects of Automotive Engine Oils on Fuel Economy of Passenger Cars and Light-Duty Trucks in Sequence VIE Spark Ignition

D8120-17 Standard Test Method for Ferrous Debris Quantification

D8126-17 Standard Test Method for Efficient Basicity Determination by Potentiometric Hydrochloric Acid Titration

D8127-17 Standard Test Method for Coupled Particulate and Elemental Analysis using X-ray Fluorescence (XRF) for In-Service Lubricants

D8128-17 Standard Guide for Monitoring Failure Mode Progression in Industrial Applications with Rolling Element Ball Type Bearings

D8148-17 Standard Test Method for Spectroscopic Determination of Haze in Fuels

D8150-17 Standard Test Method for Determination of Organic Chloride Content in Crude Oil by Distillation Followed by Detection Using Combustion Ion Chromatography

E2412-10 Standard Practice for Condition Monitoring of Used Lubricants by Trend Analysis Using Fourier Transform Infrared (FT-IR) Spectrometry