

LIQUID STANDARDS

CALIBRATION STANDARDS

SPECIFICATIONS



CALIBRATIONS STANDARDS

Red Ball TGS manufactures liquid calibration standards, verification standards, and QC check standards in accordance to your custom specifications including ASTM International methodology.

Red Ball TGS has the capability to manufacture liquid standards in a variety of different packages for both Laboratory and Process/Online analysis. These packages consist of ampoules, bottles, cylinders with dip tubes and constant pressure piston cylinders. All standards are NIST traceable by weight.



SULFUR, CHLORIDE, FLUORIDE, NITROGEN, BROMIDE IN HYDROCARBON LIQUIDS	
EPA Qualification Kits	(Calibration Kits, Precision, Accuracy – All in different levels)
D1552-14	Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)
D1266-13	Standard Test Method for Sulfur in Petroleum Products (Lamp Method)
D2622-10	Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry
D3120-14	Standard Test Method for Trace Quantities of Sulfur in Light Liquid Petroleum Hydrocarbons by Oxidative Microcoulometry
D4045-10	Standard Test Method for Sulfur in Petroleum Products by Hydrogenolysis and Rateometric Colorimetry
D4294-10	Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry
D4629-12	Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection
D5453-12	Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel and Engine Oil by Ultraviolet Fluorescence
D5762-12	Standard Test Method for Nitrogen in Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence
D6334-12	Standard Test Method for Sulfur in Gasoline by Wavelength Dispersive X-Ray Fluorescence
D6920-13	Test Method for Total Sulfur in Naphthas, Distillates, Reformulated Gasolines, Diesels, Biodiesels, and Motor Fuels by Oxidative Combustion and Electrochemical Detection
D7039-13	Standard Test Method for Sulfur in Gasoline, Diesel Fuel, Jet Fuel, Kerosine, Biodiesel, Biodiesel Blends, and Gasoline-Ethanol Blends by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry
D7620-10	Standard Test Method for Determination of Total Sulfur in Liquid Hydrocarbon Based Fuels by Continuous Injection, Air Oxidation and Ultraviolet Fluorescence Detection
UOP981-14	Trace Nitrogen in Liquid Hydrocarbons by Oxidative Combustion with Chemiluminescence Detection



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	SULFUR SPECIATION
D3227-13	Standard Test Method for (Thiol Mercaptan) Sulfur in Gasoline, Kerosine, Aviation Turbine, and Distillate Fuels (Potentiometric Method)
D5623-14	Standard Test Method for Sulfur Compounds in Light Petroleum Liquids by Gas Chromatography and Sulfur Selective Detection
D7011-10	Standard Test Method for Sulfur in Petroleum Products (Lamp Method)
UOP163-10	Hydrogen Sulfide and Mercaptan Sulfur in Liquid Hydrocarbons by Potentiometric Titration

OXYGENATES		
D4815-13	Standard Test Method for Determination of MTBE, ETBE, TAME, DIPE, tertiary-Amyl Alcohol and C1 to C4 Alcohols in Gasoline by Gas Chromatography	
D5599-10	Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Selective Flame Ionization Detection	
D5845-11	Standard Test Method for Determination of MTBE, ETBE, TAME, DIPE, Methanol, Ethanol and tert-Butanol in Gasoline by Infrared Spectroscopy	
UOP163-10	Hydrogen Sulfide and Mercaptan Sulfur in Liquid Hydrocarbons by Potentiometric Titration	

AROMATICS		
D5808-14	Standard Test Method for Determining Chloride in Aromatic Hydrocarbons and Related Chemicals by Microcoulometry	
D6069-06	Standard Test Method for Trace Nitrogen in Aromatic Hydrocarbons by Oxidative Combustion and Reduced Pressure Chemiluminescence Detection	
D7183-12	Standard Test Method for Determination of Total Sulfur in Aromatic Hydrocarbons and Related Chemicals by Ultraviolet Fluorescence	
D7184-13	Standard Test Method for Ultra Low Nitrogen in Aromatic Hydrocarbons by Oxidative Combustion and Reduced Pressure Chemiluminescence Detection	

	OTHERS
D3606-10	Standard Test Method for Determination of Benzene and Toluene in Finished Motor and Aviation Gasoline by Gas Chromatography
D4929-14	Standard Test Methods for Determination of Organic Chloride Content in Crude Oil
D7220-12	Standard Test Method for Sulfur in Automotive, Heating, and Jet Fuels by Monochromatic Energy Dispersive X-ray Fluorescence Spectrometry