



Typical Fuel Lab Testing Capabilities

Gasoline, naphtha tests:	Gasoline test methods:
Acid and Base Numbers	D664, D2896, D4739, D974
Acidity of Distillation Residue	D-1093
API Gravity, Density, Relative Density	D287, D1298, D4052
Aromatics, Olefins F.I.A.	D1319
Arsenic Content	UOP 296, GF, AA
Benzene Content	D3606
Benzene and Total Aromatics	D5769
Additional Compounds	D5769 modified
Benzene & Total Aromatics	D5580
Benzene, Oxygenates	D6277, D5845
Field support using portable IR (Infrared)	Field Sampling and Testing
Bromine Index	D2710
Bromine Number	D1159
Chlorides, Total	UOP 588
Color, Saybolt	D156
Color, Avgas	D2392
Color and Appearance	Visual
Corrosion, Copper Strip	D130
Corrosion Testing (NACE)	TMO172
DCPD (Direct Injection)	GC/MS
Detailed Hydrocarbon Analysis (DHA)	D5134, D7629, D6730, D6733, CAN CGSB



Distillation	D86
Doctor Test	D4952 (D235)
Driveability Index (Calculated) of Gasoline	D4814
Ethanol Blends, fuel grade	D381
Gum Content Existent Air Jet	D381
Gum Content Potential	D873
Heat of Combustion (Calculated)	D1405, D3338
Hydrogen Sulfide	See Mercaptan Sulfur
Lead Content (g/gal) in Gasoline	D3341
Lead Content (ppb level)	Graphite Furnace, UOP 350, IP 224
Lead Reactivity	Mobil
MTBE Purity	D5441
Manganese Content (g/gal)	D3831
Mercaptan Sulfur in Gasoline	D3227
Mercaptan Sulfur & Hydrogen Sulfide	IP 104, IP 103, UOP 163
Nitrogen Content, Nitrogen Speciation	D4629, Chemiluminescence
Octane Testing of Gasolines	ASTM, IP, other, Supercharge
Octane Number RON	D2699
Octane Number MON	D2700
R+M/2 (Antiknock Index) (Includes tests)	D2699 + D2700 average
Octane Number plus Additives	D2699 or D2700
Olefins by SFC	D6550
Oxidation Stability (Induction Period)	D525
Oxygenates and Oxygen Content	D4815 / D5599
Phosphorus Content	D3231



PNA (Extended) / PIONA * (PIONA)	Multi-Dimensional G.C
PNA * Polynuclear Aromatics	D5443
Reid Vapor Pressure of Gasoline	D323
Reformulated Gasoline Testing (RFG US-EPA)	EPA, CARB
Refractive Index	D1218
Silicones in petroleum distillates	UOP 787
Silver Corrosion, Elemental Sulfur in Gasoline	IP 227
Sulfur Content by Oxidative Microcoulometry	D3120
Sulfur Content - X-Ray	D4294 / D2622
Sulfur Content - By Hydrogenolysis	D4045
Sulfur Content by UV Fluorescenc	D5453
Sulfur Speciation	D5623
Vapor / Liquid Ratio	D5188
Vapor / Liquid Ratio (Calculation only)	D4814 X2
Vapor Pressure (Mini Method/Grabner)	D5191, D5191(EPA), D6378
Vapor Pressure Dry Bomb	D4953
VOC (Calculated)	EPA
Water Content - Karl Fischer	E203, D6304
Water Tolerance	D6422