



# PETROLEUM AND DIESEL ANALYSIS

Petroleum and Diesel fuel analysis is critical to determine and address various issues including their performance, storage stability, evaluation of refinery process efficiency and product quality, and assessment of their environmental impact. The analysis includes various physical properties and chemical compositions to equip you with the most accurate results for appropriate action.

SGS laboratories test petrol, diesel and petroleum refined products. From crude oil to fuels, petrochemicals, lubricants, and other hydrocarbon products. SGS tests the petroleum products according to regulatory standards (ASTM, IS, IP) which helps in research and development. Petrol & Diesel analysis includes trace analysis, purity and component testing, quality control testing, detailed hydrocarbon analysis, contamination identification and much more.



#### OUR SPECIFIC DIAGNOSTIC ANALYSES INCLUDE:

##### GASOLINE (PETROL)

- Appearance – visual
- Acidity mg KOH/gm – ASTM D 1093
- Aromatic content – ASTM D 1319,
- Bromine number – IP 130, ASTM D 1159
- Benzene content – GC
- Color – visual
- Color (Saybolt) – ASTM D 156
- Copper corrosion test rating – ASTM D 130, IP 154/ ISO 2160
- Density kg/L – ASTM D 1298, IP 160 / ISO 3675
- Density kg/L – ASTM D 4052 / IP 365/ ISO 12185 / P-16
- Distillation °C – ASTM D 86, IP 123 / ISO 3405 / P-18
- Doctor test – ASTM D 4952, D 235, IP 30
- Existent Gum mg/100 ml – ASTM D 381, IP 131 / ISO 6246
- Oxidation stability induction period Mins – ASTM D 525
- Mercaptan sulfur content ppm – ASTM D 3227, IP 342./ ISO 3012
- R.V.P. @ 100°F Psig – ASTM D 323, IP 69 / ISO 3007
- Sulfur content % Wt. – ASTM D 4294, ASTM D 3120, D-5453
- Oxygenates ( outside Lab) – UOP 960 (Low ox)
- Vapor lock index – By calculation
- Trace metals – ICP-Hydride Generator/ ICP USN/ SOP/ THN/-001
- Hydrogen sulphide content – IP 103 method B / UOP 163
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- Water content – ASTM D 6304-A
- Aniline point – ASTM D 611, IP 2 / ISO 2977

##### DIESEL OIL (HIGH SPEED DIESEL)

- Acidity mg KOH/gm – ASTM D 974, 664
- Ash content % Wt. – ASTM D 482, IP 4
- Cetane index – ASTM D 976, D 4739, IP 380
- Cetane number – ASTM D 613

- Cloud point °C – ASTM D 2500, IP 219
- Color (ASTM) – ASTM D 1500, IP 196
- Chloride content – IP 510 / ASTM D 5808/ ASTM D 4929
- Sulphur content – ASTM D 4294/ D5453/ ISO 8754
- Rams bottom carbon residue 10% residue – ASTM D 524/ ISO 4262
- Carbon residue micro method – ASTM D 4530 / ISO 10370
- Copper corrosion test rating – ASTM D 130 / ISO 2160
- Cold filter plugging point – IP 309
- Density kg/L – ASTM D 1298, / ISO 3637
- Density kg/L – ASTM D 4052/ ISO 12185
- Distillation °C – ASTM D 86/ ISO 3405
- Flash Point °C – IP 170
- Flash Point °C – ASTM D 93, IP 34
- Gross calorific value – ASTM D 4868
- Kinematic viscosity – ASTM D 445/ ISO 3104
- Lubricity – ASTM D 6079/ EN 12185
- Trace metals ppm – ASTM D 7111
- Particulate matter mg/ltr – ASTM D 5452
- Pour point °C – ASTM D 97, IP 15./ ISO 3016
- PAH – EN 12916
- Total sediments thermal – ASTM D 4870/ ISO 10307
- Water content % Vol. – ASTM D 95 / ISO 3733
- Hydrogen sulphide content ppm – IP 103 method B / UOP 163
- Water content – ASTM D 6304-A
- Aniline point – ASTM D 611, IP 2 / ISO 2977

**TO FIND OUT MORE ABOUT  
OUR FUEL OIL TESTING SERVICES,  
CONTACT US TODAY**

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**SGS**

**When you need to be sure**