

Tests marked * are ISO17025 accredited

TEST NAME	METHOD
Density — Oscillating U-tube method *	IP 365
Distillation characteristics of petroleum products - Micro distillation method	IP 596
Mercaptans, hydrogen sulphide, elemental sulphur and peroxides - Doctor test method	IP 30
Electrical conductivity of aviation and distillate fuels	IP 274
Corrosiveness to copper - Copper strip test	IP 154
Hydrocarbon types in petroleum products - Fluorescent indicator adsorption method	IP 156
Thiol (mercaptan) sulphur in light and middle distillate fuels - Potentiometric method	IP 342
Sulphur in petroleum and petroleum products by energy dispersive x-ray fluorescence (EDXRF) spectrometry	ASTM D4294
Filter blocking tendency	IP 387
Distillation characteristics at atmospheric pressure	IP 123
Transparent and opaque liquids - Kinematic viscosity and calculation of dynamic viscosity	IP 71
Flash point - Abel closed-cup method	IP 170
Flash Point - Pensky Martens closed cup method	IP 34
Sulphur content of automotive fuels — Ultraviolet fluorescence method	IP 490
Total sulphur in light hydrocarbons, spark ignition engine fuel, diesel engine fuel, and engine oil by ultraviolet (UV) fluorescence	ASTM D5453
Free water and particulate contamination in distillate fuels and Haze rating - Visual inspection procedures	ASTM D4176 Procedure 1
Water content of Petroleum Product - Dean & Stark distillation method *	IP 74
Freezing point of aviation fuels - Automatic laser method	IP 529
Saybolt colour of petroleum products - Saybolt chromometer method	ASTM D156
Fatty acid methyl esters (FAME), derived from bio-diesel fuel, in aviation turbine fuel: GC-MS with selective ion monitoring/scan detection method	IP 585
Water separation characteristics of aviation turbine fuels by portable separometer	ASTM D3948
Naphthalene hydrocarbons in aviation turbine fuels by ultraviolet spectrophotometry	ASTM D1840
Antioxidant (AO32) content of aviation turbine fuel by high performance liquid chromatography (HPLC)	IP 343
Static dissipater additives (SDA) in aviation turbine fuel by high performance liquid chromatography (HPLC)	IP 568
Water reaction of aviation fuels	IP 289
Existent gum content of aviation turbine fuel - Jet evaporation method	IP 540

TEST NAME	METHOD
Smoke point of kerosene, manual and automated method	IP 598
Acid number of aviation turbine fuels - Colour indicator titration	IP 354
Particulate contaminant in aviation turbine fuels by laboratory filtration	IP 423
Thermal oxidation stability of gas turbine fuels (JFTOT)	IP 323
Level of cleanliness of aviation turbine fuel - Portable automatic particle counter method	IP 565
Estimation of net heat of combustion of aviation fuels - Calculation	ASTM D3338
Kerosene burning characteristics - 24 hour method	IP 10
Smoke point of kerosene	IP 57
Coumarin in kerosene by high performance liquid chromatography (HPLC)	IP 374 method B
Motor octane number of spark ignition engine fuel (MON)	IP 236
Research octane number of spark ignition engine fuel (RON)	IP 237
Oxidation stability of gasoline - Induction period method	IP 40
Vapour pressure - Part 1: Determination of air saturated vapour pressure (ASVP) and calculated dry vapour pressure equivalent (DVPE)	IP 394
Hydrocarbon types and oxygenates in automotive motor gasoline - Multidimensional GC method	IP 566
PIONA / PNA / nPIPNA / OPNA / PONA / PHONA analysis by Reformulyzer GC	IP 566
Winter specification MTBE analysis by Reformulyzer gas chromatograph (GC)	ASTM D5441
Corrosiveness of silver from petroleum products by silver strip test	IP 611
Gum content of light and middle distillate fuels - Jet evaporation method	IP 131
Diesel and domestic heating fuels - Determination of cold filter plugging point (CFPP)	IP 309
Cloud point of petroleum products - Automatic stepped cooling method	IP 444
Petroleum products - Determination of cloud point (manual method)	IP 219
Petroleum products - Determination of pour point	IP 15
Fatty acid methyl ester (FAME) content in middle distillates - Infrared (IR) spectrometry method	IP 579
Contamination in middle distillates	IP 440
Diesel fuel - Assessment of lubricity using the high-frequency reciprocating rig (HFRR)	IP 450

TEST NAME	METHOD
Derived cetane number (DCN) of diesel fuel oils - Ignition delay and combustion delay using a constant volume combustion chamber method (CID)	ASTM D7668
Calculation of cetane index of middle-distillate fuels by the four-variable equation	IP 380
Oxidation stability of middle-distillate fuels	IP 388
Acid or base number - Colour-indicator titration method	IP 139
Weak and strong acid number - Potentiometric titration method	IP 177
Crude petroleum - Determination of water content - Coulometric Karl Fischer titration method	IP 386
Petroleum products - Determination of water - Coulometric Karl Fischer titration method	IP 438
Ethanol as a blending component for petrol - Determination of water content - Karl Fischer coulometric titration method	IP 539
Aromatic hydrocarbon types in middle distillates - HPLC method with refractive index detection (suitable for streams which contain FAME)	IP 391
Aromatic hydrocarbon types in middle distillates - HPLC method with refractive index detection (not suitable for streams which contain FAME)	IP 548
ASTM colour of petroleum products	ASTM D1500
Marker Content in Gas Oil by Lovibond Comparator	HMCE Warehouse Method
Determination of ash *	IP 4
Carbon residue - Micro method (MCRT)	IP 398
Calculated carbon aromaticity index (CCAI)	BS ISO 8217 sec 6.3a
Sulphur content - Energy-dispersive x-ray fluorescence (EDXRF) spectrometry *	IP 336
Aluminium, silicon, vanadium, nickel, iron, sodium, calcium, zinc and phosphorous in residual fuel oil by ashing, fusion and ICP-OES	IP 501
Total sediment in residual fuel oils - Part 1: Determination by hot filtration	IP 375
Total sediment in residual fuel oils - Part 2: Determination using standard procedures for ageing	IP 390 (A)
Crude petroleum and fuel oils: Determination of sediment (extraction method)	IP 53
Asphaltenes (heptane insolubles) in crude petroleum and petroleum products	IP 143
Hydrogen sulphide in fuel oils - Rapid liquid phase extraction method	IP 570
Carbon, hydrogen and nitrogen content of petroleum products and lubricants *	ASTM D5291
Crude petroleum and liquid petroleum products: Determination of density - Hydrometer method	IP 160

TEST NAME	METHOD
Determination of vapour pressure - Reid method	IP 69
Total salts content of crude oil - conductivity method	IP 265
Organically bound trace nitrogen - Oxidative combustion and chemiluminescence method	IP 379
Isolation and determination of petroleum naphthenic acids by Fourier transform infrared (FTIR) spectroscopy	Lab in-house method
Determination of pH	Lab in-house method
Total dissolved solids (TDS) in water	Lab in-house method
Total suspended solids (TSS) in effluent	Lab in-house method
Determination of sulphide Ion in water	ASTM D4658
Silica in aqueous streams by Hach meter	Lab in-house method
Chloride by MOHR's method	Lab in-house method
Conductivity of water by Hach meter	ASTM D1125
Anions by ion chromatography (IC) - chloride, phosphate, sulphate, thiosulphate	Lab in-house method
Phosphate in aqueous streams by Hach meter	Lab in-house method
Alkalinity - p(A), p(B) and methyl orange alkalinity (MEO)	BS 1427
Copper, iron and sodium in aqueous samples by inductively coupled plasma emission spectrometry (ICP-OES)	Lab in-house method
Determination of gravimetric oil using petroleum ether	Lab in-house method (Based on ASTM D2778)
Oil in effluent by Fourier transform infrared (FTIR) spectroscopy - Three peak method	HMSO Blue Book Methods for Waters: No.77 A (1983)
Colour of clear liquids: Platinum-Cobalt scale	ASTM D1209
Bromine index and bromine number of aromatic hydrocarbons by coulometric titration	ASTM D1492
Density by Twaddell hydrometer	Lab in-house method
Mercury in hydrocarbons gases and LPG by atomic fluorescence	BS ISO 6978-2: Part 2 (modified)
Mercury content of hydrocarbon liquids by atomic fluorescence	Lab in-house method
Composition of LPG and propylene concentrates - Gas chromatography method	IP 264
Analysis of natural gas streams *	ASTM D1945-03 (modified)

TEST NAME	METHOD
Commercial propane and butane - Analysis by gas chromatography (GC)*	BS EN 27941-1994 (modified)
Composition of fuel gas streams by Hi-speed refinery gas analyser (RGA)*	Lab in-house method
Analysis by Hi-speed refinery gas analyser (RGA)	Lab in-house method
Trace fixed gases by gas chromatography with helium ionisation detector (GC HID)	Lab in-house method
Sulphur content of liquefied petroleum gas (LPG) - Ultraviolet fluorescence (UVF) method	Lab in-house method
Boiling range distribution of petroleum fractions by gas chromatography (SIMDIS)	ASTM D2887
Sulphur compounds in liquefied petroleum gases (LPG), gases and liquids by gas chromatography with pulsed flame photometric detector (GC PFPD)	Lab in-house method
Hydrogen sulphide (H ₂ S) in commercial butane and propane (Stain test)	BS 4250 (Annex C)
Residues in liquefied petroleum gases (LPG)	ASTM D2158
Determination of residue of hydrocarbon liquids on evaporation by water bath	BS 4524
Soluble metals in new and used oils by inductively coupled plasma emission spectrometry (ICP-OES) - organic mode	Lab in-house method
Microbiological analysis in fuels, lubricant and water samples	IP 613
Analysis of ethylene product by gas chromatography (GC)	ASTM D2505
Assessment of the dryness of propane - Valve freeze method	IP 395
Physical properties of liquefied petroleum gas (LPG) from compositional analysis - Calculation	ASTM D2598
Analysis of ethanol as a blending component for petrol by gas chromatography (GC)	IP 571
Ethanol analysis	Details on request
Polymer (polyethylene, polypropylene) analysis	Details on request