

CNG Analysis



Compressed natural gas (CNG) is a fuel that can replace gasoline or diesel and is considered an alternative fuel. The use of Compressed Natural Gas (CNG) as a transport fuel is a mature technology and widely used in parts of the world. Though CNG is a fossil fuel, it is the safest burning fuel in terms of NO_x and soot (PM) emissions.

Natural gas comprises mainly of methane; it is one of the purest alternative fuels. Natural Gas is compressed to form CNG and can be used to fuel cars and busses or as (LNG) liquefied natural gas to fuel heavy vehicles.

CNG delivered to a fuel refueling station tend to vary sometimes with the supply composition in the vehicles. CNG quality can vary depending upon storage, location, source and transportation methods. Variation of CNG in chemical composition can affect the quality of fuel and performance of the engine. This can in-turn affect the CNG engine warranty protection.

TUV laboratories examine an extensive range of components found in natural gas using gas chromatography, mass spectrometry, and other natural gas analysis methods.

CNG testing is done according to IS: 15958 and PNGRB F.No.S-A-Admn./II/8/2010. Sampling is performed according to IS: 15125.

Our Analysis Includes below Test Parameters:

- Composition - ASTM D1943
- GCV - ASTM D3588
- NCV - ASTM D3588
- Relative Density - ASTM D3588
- Vapor Pressure at 40C- ISO 4256
- Total Volatile Sulphur – ASTM D 3246
- Copper Strip Corrosion – ISO 6251

- Hydrogen Sulphide (H₂S) (ppm by wt. max.) – ISO 8819
- Water dew point (Degree Celsius, max)
- Hydrocarbon dew point (Degree Celsius, max)
- Carbon dioxide (mole % max.)
- Total Inerts (mole %)
- Oxygen (% mole vol. max.)
- Total Sulphur (ppm by wt. max.)
- Temperature (Degree Celsius, max. and min.)
- Wobbe Index (for domestic consumers)
- Hydrocarbons (volume percent of total organic carbon present):
 1. Methane, Min
 2. Ethane, Max
 3. C₃ and higher HC, Max
 4. C₆ and higher HC, Max
 5. Total unsaturated HC, Max
- Corrosive components:
 1. Total sulphur², mg/m³, Max
 2. Oxygen, volume percent, Max
- Carbon dioxide, volume percent, Max

About Us:

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We are proud to provide increasing levels of services to the best known, largest global and national companies as well as medium and small industries in diverse sectors like Oil & Gas, Petrochemical, Nuclear, Renewables, Infrastructure, Food, Power, Manufacturing, Chemicals, Pharma, Paper, Automobiles,

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