



## Winter Grade Fuel in Ladakh

The **winter-grade diesel** was launched to address **the problem of loss of fuel during extreme winter conditions.**

- Motorists in high-altitude areas of Ladakh face the problem of **freezing of diesel** in their vehicles when **winter temperatures drop to as low as minus 30-degree celsius.**
- The **special winter-grade diesel** is developed by the **Indian Oil Corporation Limited (IOCL).**
  - It has a **pour point of minus 33-degree celsius** and **does not lose its fluidity** even in the region's extreme winter weather unlike normal grade diesel, which is difficult to use in sub-zero temperatures.
    - The pour point of a liquid is the temperature **below which the liquid loses its flow characteristics.**
    - It also meets **Bureau of Indian Standards (BIS)** specification of **BS-VI grade.**
- The special winter-grade diesel will help **to reduce** the hardships faced by the local people for transportation and mobility during the harsh winter months.
- It will further **facilitate the local economy** as well as **tourism** in the region.

### BS-VI

- **Bharat stage norms** are **emission control standards** put in place by the government to keep a **check on air pollution** based on the **European regulations (Euro norms).**
- These standards set limits the release of air pollutants from equipment using internal combustion engines, including vehicles.
  - The higher the stage, the more stringent norms.
- **BS VI's key improvement in fuel quality over BS IV include,**
  - **Lower Sulphur Content:** It has lowered **sulphur content of 10 parts per million (ppm).** Sulphur in fuel contributes to fine particulate matter emissions.
  - **Harmful Hydrocarbon:** It seeks to **reduce the level of certain harmful hydrocarbons** in the emissions that are produced due to incomplete combustion of fuel.

**Source: TH**