



DASHMILE LUBTECH

DEF

Product Description

Diesel engines can be run with a lean burn air-to-fuel ratio (over stoichiometric ratio), to ensure the full combustion of soot and to prevent them exhausting unburnt fuel. The excess of air necessarily leads to generation of nitrogen oxides (NO_x), which are harmful pollutants, from the nitrogen in the air. Selective catalytic reduction is used to reduce the amount of NO_x released into the atmosphere. Diesel exhaust fluid (DEF) from a separate tank is injected into the exhaust pipeline, where the aqueous urea vaporizes and decomposes to form ammonia and carbon dioxide. Within the SCR catalyst, the NO_x are catalytically reduced by the ammonia (NH₃) into water (H₂O) and nitrogen (N₂), which are both harmless; and these are then released through the exhaust.

Applications:

Diesel exhaust fluid for SCR automotive catalyst operation fluid in heavy duty Euro IV & Euro V vehicles on and off road; also suitable for gensets.

Benefits:

- Reduces maintenance costs.
- Extends SCR system lifespan.
- Ensures SCR system efficiency.
- Improves fuel economy.

Specification & Typical properties:

| Sr. No. | Typical Characteristics | Specification | Item Conclusion | Results |
|---------|-------------------------------|-----------------|-----------------|---------|
| 1 | Urea (By Weight)% | 31.8 – 33.2 | Conform | 33.1 |
| 2 | Density @ 29.5°C | 1087 0 – 1093 0 | Conform | 1090.0 |
| 3 | Refractive Index at 20°C | 1.3817 – 1.3843 | Conform | 1.3838 |
| 4 | Alkalinity as NH ₃ | ≤ 0.2 | Conform | <0.1 |
| 5 | Biuret % | ≤ 0.3 | Conform | 0.28 |
| 6 | Insoluble (mg/kg) | ≤ 20 | Conform | 7 |
| 7 | Aldehyde | ≤ 0.5 | Conform | 4 |
| 8 | Phosphate(PO) | ≤ 0.5 | Conform | 0.2 |
| 9 | Al | ≤ 0.5 | Conform | < 0.1 |
| 10 | Ca | ≤ 0.5 | Conform | < 0.1 |
| 11 | Fe | ≤ 0.5 | Conform | < 0.1 |
| 12 | Cu | ≤ 0.5 | Conform | < 0.1 |
| 13 | Zn | ≤ 0.2 | Conform | < 0.1 |
| 14 | Cr | ≤ 0.2 | Conform | < 0.1 |
| 15 | Ni | ≤ 0.2 | Conform | < 0.1 |
| 16 | Mg | ≤ 0.5 | Conform | < 0.1 |
| 17 | Na | ≤ 0.5 | Conform | < 0.1 |
| 18 | K | ≤ 0.5 | Conform | < 0.1 |