

Ecwamix

Chemical Systems

Your Specialist Partner in Sustainable Chemical Solutions



DieselMAX is a special formula product for improving system cleanliness in Diesel Injection Systems to promote *improved atomisation* and hence *improved combustion* of Diesel Fuel.

Why a Diesel Additive?

Diesel in South Africa & Africa is becoming costlier to individual users and companies at large. Moreover, the *quality of diesel* is steadily declining and raises concerns as to the effects this has on working engine parts, and the average *fuel consumption*.

Maintenance statistics show that majority of the diesel *engine problems* experienced daily is related to and stems from poor quality diesel. This directly results in *poor combustion* efficiency.

Factors effecting modern day Diesel

- ✓ Irregular grades of fuel oil
- ✓ Refining Shortcuts
- ✓ Crude oil industry allocation
- ✓ Sulphur ratios in diesel



DieselMAX *provides the solutions and offers the best in fuel additive technology.*

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Technical Aspects of DieselMAX

Addressing Diesel Engine Running Factors with the DieselMAX



1. Lubricity

DieselMAX (alone or in synergy with BioDiesel at 2%), provides lubrication for diesel pump components such as *pistons and seals*.

2. Anti-Corrosion

DieselMAX contains components to *inhibit corrosion*, hence extending the parts life.

3. Injector System Cleanliness

Whether on individually pressured injectors or on a common-rail system, DieselMAX acts as an *anti-gumming agent* which prevents build-up of diesel gums. Thus, keeping the pressured lines clean and nozzle heads free from blockages.



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4. Atomization / Vaporization

By allowing for optimum nozzle pressure, the injector spray is able to atomize most efficiently. This leads to *complete vaporization of the Diesel fuel*, without any liquid fuel coming into contact with the surfaces of the combustion chamber section of the cylinder head. This optimum atomization ensures *complete fuel consumption*, with minimal calorific loss and minimal particulate emission.



5. Working Temperature of the Diesel Engine

Because of minimal calorific wastage, the overall fuel consumption is reduced, which in turn keeps the temperature in the cylinder slightly lower compared when more fuel is burnt. The knock-on consequence is a *reduction in the NOx emissions* when using DieselMAX.

6. Overall Reduction in Fuel Consumption

Although there are variances according to various diesel engines. Notable where stroke/bore ratios are markedly different in differently functional diesel engines, and where multiple injection firing technology is employed. *Improvements of between 7-20%* of engine output has been noted for most of our test work.



DieselMAX was designed for Africa and is **locally manufactured** in our **ISO 9001** facility at Ecwamix.

SABS test report available at:

www.ecwamix.co.za