

On the road...

...to cleaner, greener and more cost-effective transportation...

A new technology is about to be launched into the UK and European transport markets that will have a significant beneficial financial impact for fuel buyers of diesel engined fleet operators.

Caldic UK Ltd, a leading chemical distribution company already present in the industry with their range of engine coolants, has signed an agreement to distribute DiesoLIFT™ for International Fuel Technology Inc., a St Louis, Missouri-based technology company.

DiesoLIFT™ is a multi-functional surfactant-based fuel additive that is proven to give impressive fuel economy savings and reduce emissions significantly.

The product has undergone six years of rigorous testing at independent industry renowned test facilities and field trials; more than £20m has gone into the development and testing programme.

The following independent test laboratories have tested and verified the efficacy of IFT's proprietary technology: Southwest Research Institute (US); MI Technology (UK); Prodrive (UK); BfB Laboratories (Belgium); Forest Engineering and Research Institute of Canada (Canada); and Gerotek Test Facilities (South Africa).

Unlike traditional fuel additives, which are primarily derived from petroleum, DiesoLIFT™ is based on non-petroleum, naturally produced renewable resources and relies entirely on the surfactant physical chemistry properties of a complex mixture of detergent substances.

What gives DiesoLIFT™ extra credibility is the fact that in January 2008, IFT



were accredited with the Institute of Transport Management's Innovation in fuel technology award 2008.

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Commenting on the award to IFT, Patrick Sheedy, Media & PR Director for the Institute, said: "Taking independent research and clinical trials into consideration, it is our opinion that DiesoLIFT™ presents a compelling financial and environmental benefit to the end-user, by ensuring lower overall fuel consumption through improved fuel-efficiency and reduced emissions. An added benefit is that it is easy to use, requiring no additional parts, and is simply blended with the fuel. International fuel technology is to be highly commended for the

advancements and innovation it has shown to date."

Trials are already getting under way in the UK with rail operators and commercial vehicle fleet operators, including major supermarket chains and bus companies.

In the USA, a major grocery chain has switched its entire fleet over to using DiesoLIFT™ after a field trial demonstrated a fuel saving of over 6% and reduced maintenance on their fleet.

The product is simply added to customers' bulk storage tanks at the rate of one part DiesoLIFT™ to 600 parts fuel; it can be splash filled and mixes readily within the tank. The benefits gained from the treatment of road diesel fuel with DiesoLIFT™ can be summarised as follows:

Fuel economy:

- Proven economy of 5% minimum;
- Potential economy in service from 5-10% on (as demonstrated in numerous truck and bus fleet trials).

Significant reduction of pollutant emissions:

- The treatment of diesel fuels with DiesoLIFT™ has a direct impact on the reduction of noxious emissions such as hydrocarbons, carbon monoxide, particulates and exhaust smokes;
- Greenhouse gases such as carbon dioxide and nitrogen oxides are also indirectly reduced after treatment of diesel fuels with DiesoLIFT™ due to the resulting reduction of fuel consumption.

Lubricity improvement and friction reduction:

- Tests carried out at oil industry certified independent laboratories have clearly demonstrated a

| Annual fuel usage (litres) | | 120,000 | 500,000 | 1 mil | 5 mil | 12 mil | 100 mil |
|---|----|---------|---------|---------|----------|----------|---------|
| % fuel | 4% | £3,000 | £12,000 | £23,000 | £116,000 | £280,000 | £2.33 m |
| economy | 5% | £4,000 | £16,000 | £33,000 | £166,000 | £400,000 | £3.33 m |
| saving | 6% | £5,000 | £21,000 | £43,000 | £216,000 | £520,000 | £4.33 m |
| annual fuel cost saving including cost of Diesolift | | | | | | | |

Spreadsheet showing possible savings by using Diesolift based on fuel price of £1 per litre

significant lubricity improvement up to 50% in diesel fuels after treatment with DiesoLIFT™.

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Engine reliability and durability:

- No engine damage or mechanical failure has ever been linked to the use of DiesoLIFT™;
- Diesel fuel characteristics remain within standard specifications after treatment with DiesoLIFT™;
- To comfort potential users, IFT has contracted a worldwide insurance policy for up to seven million dollars' coverage against any risk

of mechanical damages or failures proven to be directly linked to the use of DiesoLIFT™.

All proven benefits above are the tangible effect of the inherent properties of the IFT technology:

- Atomisation and combustion improvement;
- Detergence and dispersion (fuel system cleaning);
- Formation of a protective monolayer at the metallic wall surfaces of engines and fuel systems, resulting in:
 - Significant lubricity improvement;
 - Improved oxidation stability;
 - Enhanced corrosion resistance;
 - Enhanced resistance to microbial contamination;
- Co-solvency – stabilisation of residual water;
- Biodegradability.

Test programmes at research centres (standardised and controlled tests on both vehicles and engines) and on vehicle fleets are routinely carried out to establish the benefits and performance of the IFT technology.

Caldic UK were very quick to recognise the potential of DiesoLIFT™ and plans are to roll-out the distribution across the Caldic Group in Europe, and although the product has only just entered the commercialisation stage in the UK, the interest from fleet operators is gathering pace very quickly, and trials are already going ahead in road and rail.

To find out more about the technical, environmental and commercial benefits of using DiesoLIFT™, simply contact Caldic UK Ltd and we can put you on the road towards cleaner, greener and more cost-effective transportation.



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