

Gallagher Newsletter

What you need to know about DEF (AdBlue®)

Why use the DEF product?

Since the passing of the Clear Air Act in the 1970s the EPA (Environmental Protection Agency) has regulated emissions of nitrogen oxides and other pollutants from diesel vehicles.

Selective Catalytic Reduction (SCR) is an emissions control technology system that injects a liquid-reductant agent through a special catalyst into the exhaust stream of a diesel engine. The reductant is known as DEF (Diesel Exhaust Fluid). DEF is an exhaust system additive which reduces nitrogen oxide emissions from diesel engines. AdBlue® is the trade name for a widely used DEF product.

DEF for Commercial and Heavy Vehicles.

While the implementation of this legislation and technology has been in stages and is quite complex, the end result is, vehicle manufacturers have been forced to build SCR technology into their new vehicles.

People operating later modelled commercial heavy duty vehicles, have been required to routinely fill their vehicles with DEF while re-fuelling with diesel since 2005, they are aware and experienced in the use of SCR technology and DEF.

Most service stations in Australia and New Zealand with a commercial focus are already established with appropriate DEF dispensing solutions to cater for this commercial sector.



Commercial users here are mostly knowledgeable and experienced in DEF dispensing and SCR technology

Gallagher Commercial DEF Dispensing Solutions.

Gallagher Fuel Systems have integrated DEF dispensing options in their PULSE range. These dispensers maintain the same look and feel of a standard PULSE dispenser, yet differ because the componentary that has contact with DEF is made from high end corrosion resistant material, ensuring the dispenser maintains its customary long life, despite the highly corrosive nature of DEF.

A feature of the Gallagher dispensers, is the ability to deliver diesel and DEF simultaneously from a single dispenser. The transaction is completed in one EFTpos stroke and the fuelling place can be taken by another customer, increasing throughput for the dealer.



Simultaneous DEF and Diesel Dispensing

DEF for Passenger Cars.

Now all European diesel fuelled light vehicle models including passenger cars are required to fulfil emission legislation. A remarkable number of SCR/DEF enabled light vehicle models have already penetrated the European market. SCR technology will become the most widespread technology for emissions reduction in diesel passenger cars and vans in the near future. Of the new European diesel models being imported here, approximately 25% have inbuilt SCR technology.

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There is not a single integrated DEF dispenser in Australia or New Zealand designed specifically for servicing light vehicles and passenger cars. Why?

There are many factors to consider here, one being the usage of DEF for light vehicles. Of course this will vary depending on engine size, vehicle type and driving style. It's estimated up to 2 litres of DEF is required per 1000 kms travelled. With the average DEF tank capacity of between 5 and 20 litres.

Some car dealerships provide DEF refilling as part of vehicle servicing. Although most of these dealers are without DEF dispensing making it difficult for them to accurately gauge the amount of DEF product going into the vehicle.

Most cars will require a re-fill before the next service interval because of the small tank size.

Unlike the commercial DEF users, most retail customers are unaware of key aspects of the DEF product.

So what should you be aware of with the DEF product?

Inadvertently putting DEF into the diesel tank of a vehicle will cause damage to the fuel lines and can result in the vehicle being written off beyond repair. Gallagher DEF dispensers have a magnetic interlocking system in the nozzle to prevent any misfuelling events for their commercial DEF dispensers. Our retail solutions will also have a locking mechanism.

DEF is highly corrosive. If exposed, it will move slowly along a surface until dry where it forms rock hard crystals. If DEF product is spilled in or on your car, wipe it off immediately and rinse with plenty of water. DEF is not flammable, but may irritate skin if in contact.

How does one know when their car needs more DEF?

Your car will display intermittent warnings in a countdown style with plenty of kilometres to go before it runs completely out. If the car becomes empty the driver cannot re-start the car once it has stopped.

So where do we go from here?

Without doubt we feel it necessary to establish an appropriate and convenient DEF/AdBlue® infrastructure for our passenger car and van customers.

Gallagher Fuel Systems have developed smart solutions for the commercial sector. We can easily replicate this technology to fit into the retail environment.

We would love to know what ideas you may have regarding smart ways to cater for this increasing demand. For further discussion or more information about DEF please feel free to contact our Business Development Managers. We are very interested to hear what you have to say.



Passenger car DEF dispensing

Scott Ellery MOB +64 21 792 934
Business Development Manager | New Zealand

Derek Hjelm MOB +61 424 164 814
Business Development Manager | Australia



www.gallagher.com