

ADBLUE OPERATING FLUID

AdBlue is an operating fluid for Selective Catalytic Reduction (SCR) technology. AdBlue is not a fuel or fuel additive; it is injected into the exhaust system.

It is a colourless liquid made up of 67.5% demineralised water and 32.5% urea. In the SCR process its role is as a reduction agent that reacts with, and neutralises, nitrogen oxides (NOx).

The main components of the SCR system are the SCR catalyst, the AdBlue injection unit, the AdBlue tank and the AdBlue closing control unit. AdBlue is injected into the exhaust system of the catalyst. When the high quality of the urea reacts with the NOx molecules the exhaust are converted into harmless nitrogen and water, thereby reducing NOx emissions to air outside the vehicle.

AdBlue also reduces diesel consumption by up to 6%, resulting in significant cost cutting. Average consumption of AdBlue is generally 5% of diesel use – about 1.5 litres per 100 km for motorway driving.

AdBlue is not hazardous or harmful to the environment and is categorised under the minimum-risk category of transportable fluids.

AdBlue Packs



10 litre pack
3496698M1



210 litre drum
3496699M1



1,000 litre IBC
3496700M1

Ute Packs



FC-200LAB
FC-400LAB

200L Ute Tank with 12V pump, 6m hose & manual nozzle
400L Ute Tank with 12V pump, 6m hose & manual nozzle

Pump Kits



FP-332080

Rotary barrel pump kit with hose, adaptor & stainless steel nozzle



AE-KP2195M

2:1 ratio 210L drum kit with nozzle

AE-KP21A

2:1 ratio air operated IBC kit with 4m hose & auto nozzle

AE-KP21M

2:1 ratio IBC kit with 4m hose & manual nozzle



FP-201AA0

12V 210L drum kit with 6m hose, suction kit & manual nozzle

FP-201AA1

12V IBC kit with 6m hose, suction kit & manual nozzle

FP-201B10

240V IBC kit with 6m hose, suction kit & auto nozzle

Ancillary Equipment



Gravity Feed Kit

FP-155170



Inline Digital Flow Meter

3496823M1



Manual On/Off Nozzle

3496824M1



Eleflex Magnetic Collar

3496704M1



For further information
contact your local AGCO dealer

Air1® is a registered trademark of Yara International ASA.
AdBlue® is a registered trademark of the Verband der Automobilindustrie e.V. (VDA).

Agricultural Driver's Guide to
AdBlue®

Have you heard about an operating fluid called AdBlue? It is required in most new tractors, combines and other diesel powered farm machinery. Whether you have or not, it is likely you will soon be driving farm machinery that will require this operating fluid and here we explain what it means to you as an operator.

What is AdBlue?

AdBlue (a registered trademark of the VDA) is a vehicle operating fluid for new engine technology. It is based on a high purity urea solution, therefore it is not a fuel, nor is it mixed with fuel. If you have a machine that requires AdBlue you will need to dispense this product into a separate tank which will be located on the vehicle, identified by its blue cap.

What is Air1?

Air1 is a brand of AdBlue commercialised by Yara, the world's largest AdBlue producer. It is the world's leading brand, used since 2006 by millions of heavy-duty vehicles around the world.

Why do I need AdBlue?

Over the past 15 years exhaust emission limits have been lowered to help reduce the amount of harmful toxic gas (including NOx) that is released into the atmosphere. Farm machinery manufacturers have had to re-develop their engines to comply with EU legislation Tier IIIb and Tier IV. A new technology called SCR (Selective Catalytic Reduction) is a proven system at reducing NOx emissions from exhaust gases.

How does it Work?

SCR is now fitted to most new drivable machinery coming off the production line and it requires a re-agent known as AdBlue to be sprayed into the exhaust system. AdBlue is used to create a chemical reaction in the catalyst so that NOx gases are converted to harmless steam and nitrogen, which are emitted from the exhaust pipe.

How do I know if I need AdBlue?

Your local AGCO dealer will advise you about your new machine and whether it needs AdBlue at the time of purchase. Your dealer can also provide you with the AdBlue itself and any associated pumping equipment.

The next vehicle you drive may need AdBlue so familiarise yourself with what to look out for:

- A plastic AdBlue tank, smaller than the fuel tank, will be fitted on the body of the vehicle, it will have a blue cap for easy identification.
- There will be an AdBlue digital display located in the cab indicating the level of AdBlue in the tank.
- Tank caps and digital displays may differ in look and position dependant on the vehicle make/brand.

Do not operate your vehicle without AdBlue in the tank; doing so will cause damage to the catalytic converter, filters and nozzles. A vehicle operating without AdBlue may enter crawler-mode and will be operating illegally.

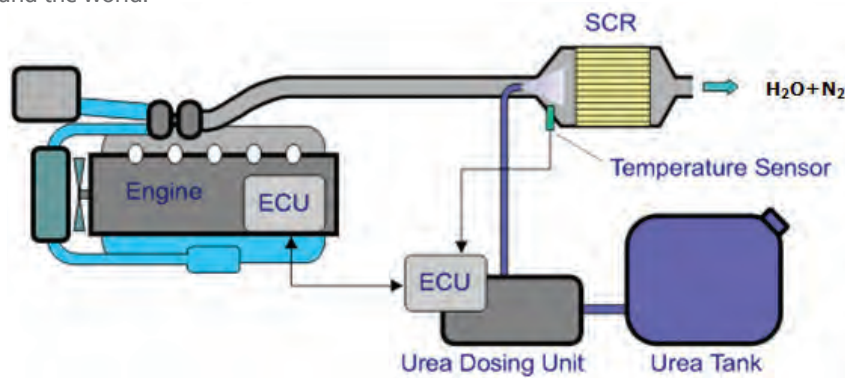
Examples of AdBlue tanks and filler caps



Examples of digital AdBlue displays



The digital AdBlue displays may state 'UREA' or 'DEF' (Diesel Exhaust Fluid)





Why should I be careful about which AdBlue I use?

It is important that you only purchase AdBlue from a reputable dealer in dedicated AdBlue packaging. Contaminants from unsealed packages will cause problems to your SCR system. It is also important not to use old diesel/oil/other containers to transfer AdBlue. It must remain at its high specification state to be compatible with your SCR system. Using a mix of any other type of urea will cause damage your catalyst and injector systems. Repairs will not be covered by your warranty. It is imperative to respect the investment that you have made in the purchase of your vehicle.

AGCO's recommended source for high-specification AdBlue is YARA, whose AdBlue brand is called Air1. This is available from your local AGCO dealer. To locate your nearest AGCO dealer please check our locators on www.masseyferguson.com, www.fendt.com, www.valtra.com, www.challenger-ag.com.

Air1 is a reliable, quality product whose production and distribution process ensures that you are guaranteed contaminant-free AdBlue of the highest specification for your SCR needs.

Frequently Asked Questions

What is AdBlue and how should I use it?

AdBlue is a vehicle operating fluid used to reduce emissions, it is a high purity urea solution and is not a fuel additive, nor does it touch the fuel system. It is a mix of demineralised water (67.5%) and urea (32.5%) to a specific DIN specification. AdBlue is contained in a separate tank on the machine's chassis. It is sprayed into the exhaust gases via the SCR system which is installed when the vehicle is being built. Refill the AdBlue tank when the display indicates that the tank is nearing empty. Do not operate the machine without AdBlue in the tank. Never fill the diesel tank with AdBlue or vice-versa. Do not dilute the AdBlue.

How much AdBlue will I need?

You will not need to replenish your AdBlue tank every time you refill with diesel. Typical AdBlue to fuel usage is between 4% - 6%, this will differ depending on machine-type, type of work undertaken and miles per gallon.

Will it cost me more to run my machine?

AdBlue will reduce your diesel consumption, making it more cost-effective to run your machine. Diesel consumption can be reduced by between 5% and 10% depending on machine-type and the type of work being undertaken.

What happens if I run out of AdBlue?

You should always carry a spare 10 litre can of AdBlue with you in case of emergencies. If you run out, drive immediately to your nearest AdBlue supply to refill. Your vehicle will be operating illegally if you are driving without AdBlue and the injector nozzle and catalyst will suffer damage.

Is AdBlue harmful?

AdBlue is not harmful to humans or animals. If you get it on your skin or clothes, rinse with plenty of tap water as it may irritate due to the ammonia content. It is not poisonous but if ever consumed accidentally you should drink tap water and consult a doctor. Clean spillages immediately with plenty of water as left untreated it can corrode surfaces.

Is AdBlue classified as hazardous?

No. It is not subject to any hazardous regulations. It is a non-toxic, non-flammable, non-explosive fluid, it does not burn and will not aid combustion. It is therefore very safe to use.



10 litre can

How long does it keep for?

AdBlue, if stored according to guidelines, will keep for at least 12 months.

How do I store it?

AdBlue should ideally be stored indoors, between 0 - 30°C, out of direct sunlight and properly sealed when not in use.

Can I decant it into other containers?

We strongly recommend that you do not do this as it may become contaminated and some containers are not suitable. Always keep it in its original HD plastic containers and use properly approved pumping equipment. The ammonia content in AdBlue will cause etching to the following materials: brass, copper, aluminium, mild steel, which in turn will contaminate the product, potentially harming your vehicle.

Can I leave it in my combine harvester over winter?

AdBlue will remain in good condition for 12 months if kept sealed. Before operating your machine we recommend you test the AdBlue (kits are available from your AGCO dealer) if it has been left un-used over a period of time.

Your AdBlue needs covered by your local AGCO Dealer

Air1 AdBlue pack sizes available:

- 10 litre can – ideal as an emergency supply to keep with you in the vehicle.
- 210 litre drum – keep on site for top-ups, ideal if you have one or two mid-range SCR machines.
- 1000 litres (known as an IBC) – a cost-effective option for those with 3 or more larger SCR machines.
- Bulk Supply – the best option if you have large fleets of SCR vehicles or for contractors, etc.

To identify the best size for your needs, calculate the litres of fuel you use annually – your AdBlue usage will be 4% - 6% of this figure – remember you should use your AdBlue within 12 months of opening to avoid wastage.

Other Equipment Available Pumps:

- 10 litre cans supplied with a hose/spout
- Drum pump with hose
- Premium IBC pump with magnetic nozzle and flow meter
- Premium IBC pump with auto-stop nozzle and flow meter
- Economy IBC pump, standard non-auto nozzle, no flow meter
- Rotary manual IBC pump

AdBlue Testing Equipment

These are ideal for ensuring your AdBlue is good to use, at the correct concentration and uncontaminated:

- Refractometer to test the urea concentration of the AdBlue (can also be used to check anti-freeze and battery acid)
- AdBlue test kit, including hydrometer and oil paper strips

Should you have any further questions, or require more information, please do not hesitate to contact your local AGCO dealer who will be happy to help.



1,000 litre IBC
(intermediate bulk container)



210 litre drum