

Safe Refuelling of AdBlue (DEF, AUS 32)

The properties of AdBlue® urea solution (also called DEF, AUS 32 or ARLA 32) is specified in ISO 22241-1. There is a good reason to adhere to this standard because an SCR catalyst does not tolerate 'any' quality of urea solution - and certainly not if it is contaminated. Heavily contaminated AdBlue will damage the catalyst. According to the German magazine "Brennstoffspiegel" 3/2011 this actually happens, and might cost the operator up to 5000 Euro.

In practice, impurities usually do not stem from the production process - provided you have chosen a reputable supplier. It will often derive due to unsuitable storage and refuelling equipment. The media contact with stainless steel and some plastics, such as POM and PTFE is not a problem. However, e.g. uncoated Aluminum is considered critical - and contact with copper, zinc alloys, and many low-priced hose materials should be avoided.

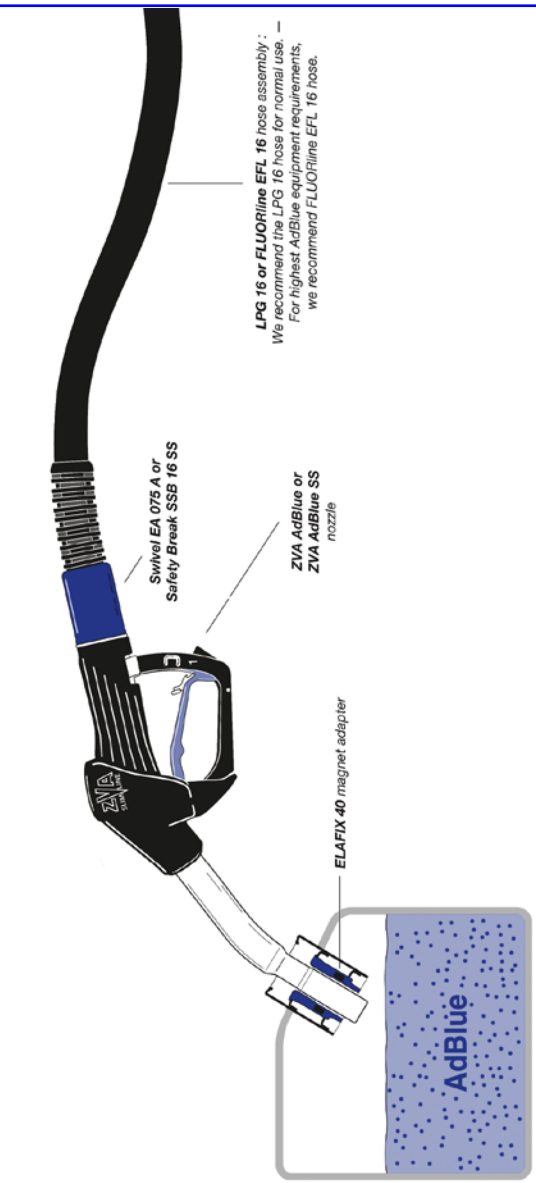
For the loading and unloading of AdBlue to tankers, refuelling specialist Elaflex recommends the use of stainless steel fittings (eg, Dry Disconnect Couplings) and UPE-lined tanker hoses.

For refuelling of trucks with AdBlue, ISO 22241-4 calls for the use of special nozzles and components which prevent misfuelling of urea solution into diesel tanks.

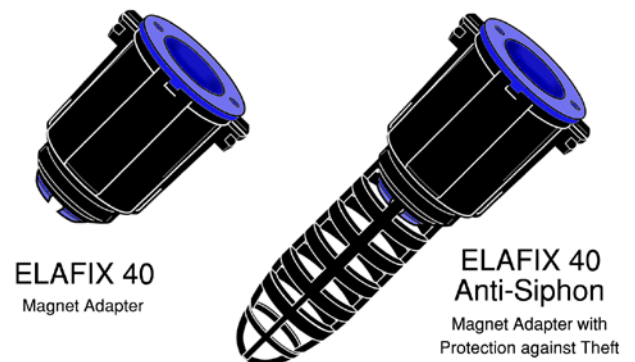
For this application, you have the choice between the "highly pure" combination of the stainless steel nozzle **ZVA SS AdBlue** with fluorine polymer lined hose **EFL 16** - and the most widely used combination of **ZVA AdBlue** with the plasticiser-free hose **LPG 16**. It is useful to add a Safety Break **SSB 16 SS** to protect damage to the truck tank or the dispenser in case of a drive-off.

The most important criteria concerning the nozzle is the prevention of misfuelling. Cheap, non-standardised AdBlue nozzles do not have this feature, and it is possible to accidentally fill AdBlue into the diesel tank. On the other hand, the ZVA AdBlue nozzle will allow refuelling only in combination with the **ELAFIX 40** magnet adapter which is built into the AdBlue filler neck of the truck. As an option, the anti-theft version **ELAFIX 40 Anti-Siphon** is available.

Both the truck tank manufacturers as well as public forecourt operators almost solely use quality components for AdBlue refueling. Looking at depots and truckyards the picture is different. Inferior pumps, hoses, couplings and nozzles prevail for the handling of AdBlue. A change in thinking, "not short-term and cheap, but safe in the long term" might be advisable.



AdBlue Refuelling Components



New: ELAFIX 40 Anti-Siphon,
for the protection against theft of AdBlue